

REFLECTION

ANNUAL REPORT

(April 2014 - March 2015)



**Agricultural Training Centre
&
State Agricultural Management & Extension Training Institute
(SAMETI)**

RAMAKRISHNA MISSION ASHRAMA

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Foreword

“Let New India Arise – out of the peasants’ cottage, grasping the plough...” – when we explore the views and thoughts of Swami Vivekananda, we find a coherent and clear-cut idea emerging out on the social and economic issues facing our country. Cite just one reference where we find Swami Vivekananda expressing his concern over Indian farmers and farming with one of his disciples as early as in 1891, two years before his historic passage to the West. Vivekananda says: “Personally, I feel that there is no harm if anyone makes agriculture his profession. ... The sage Janaka held the plough in one hand and studied the Vedas using the other. Our sages of old were farmers. ... Look how America has become so advanced by developing agriculture. ... We have to learn the science of it, and apply that knowledge to the development of our agriculture.” Swamiji further continues: “If educated men go to live in the villages, even small villages will become developed; and if agriculture is carried on scientifically, then the yield will be more. In that way the farmers will be awakened to their duty; their intellectual faculties will develop; they will be able to learn more and better things; and that is very necessary for our nation.”



This is the cue and the clue that Ramakrishna Mission frames its policy regarding the welfare activities in the agricultural sector. In the new millennium, the challenges in Indian agricultural sector are quite different from those met in the previous decades. The enormous pressure to produce more food from less land with shrinking natural resources is a tough task for the farmers. Indian agriculture has to become more cost-effective to meet the growing challenges and opportunities arising out of WTO agreements and the consequent globalization impacts. For this, future growth of agriculture has to be yield based. The most critical issues that plague Indian agriculture at present are the knowledge deficit and infrastructure deficit, especially in the rural areas. In spite of great strides the nation has made, our farmers are yet the most vulnerable lot because of various socio-economic factors.

From its inception Ramakrishna Mission Agricultural Training Centre (RKM-ATC), Narendrapur is a humble endeavour to sympathetically stand beside them for the progress and, thereby, ultimately for agricultural development of the country. The RKM-ATC with its recent component State Agricultural Management and Extension Training Institute (SAMETI) began journey more than four decades ago with a name Gram Sevak Training Centre suggestive enough of its purpose. Today, travelling miles, it offers them the latest knowledge and technology through scientific trainings and organizations in collaboration with appropriate central as well as state government departments. By dint of its different forums it takes the fruits of its researches to them, embracing the rural areas of the state of West Bengal. It sticks to the principle pronounced by Swami Vivekananda: “If the mountain does not come to Mohammed, Mohammed must go to the mountain. If the poor boy cannot come to education, education must go to him.”

Now, this report of RKM-ATC and SAMETI is a reasonably wide window that provides a convenient glimpse of its multifarious activities and highlights its achievements during the year 2014-15. Trust it would enlighten readers with necessary information regarding the significant features of this particular unit of Narendrapur Ashrama.

In conclusion let us invoke the dictum in ancient Taittiriya Upanishad: “अन्नं न नन्दिद्यात्, तद्व्रतम्। अन्नं न परचिक्षीत्, तद्व्रतम्। अन्नं बहु कुरुवीत्, तद्व्रतम्।” May we, as a nation, excel in agriculture and ensure an abundance of food-grains. May Sri Ramakrishna, Holy Mother Sri Sarada Devi and Swami Vivekananda shower their choicest blessings on us in our endeavour of bringing smiles to the faces of annadata farmers.

Swami Sarvagananda

Secretary

Preamble

The role of human resource development is the most important factor for any development anywhere. Mere materials cannot cause development, if the capacity of the client is not developed properly. India is endowed with physical and intellectual resources with a tremendous potentiality to lead the World. Unfortunately, many of the wealth is improperly used, underused and even wasted to a large extent due to the lack of awareness, attitude, skill and knowledge development of the client.

West Bengal is one of the prominent states in the country in terms of contribution in the sector of agriculture. To combat the food security of the growing population, India is still able to grow its food grain baskets. But the challenge of future is not small and the expectations are also very high. The continuous process of human resource development with the limited land and other resources is the only means to touch those expectations.

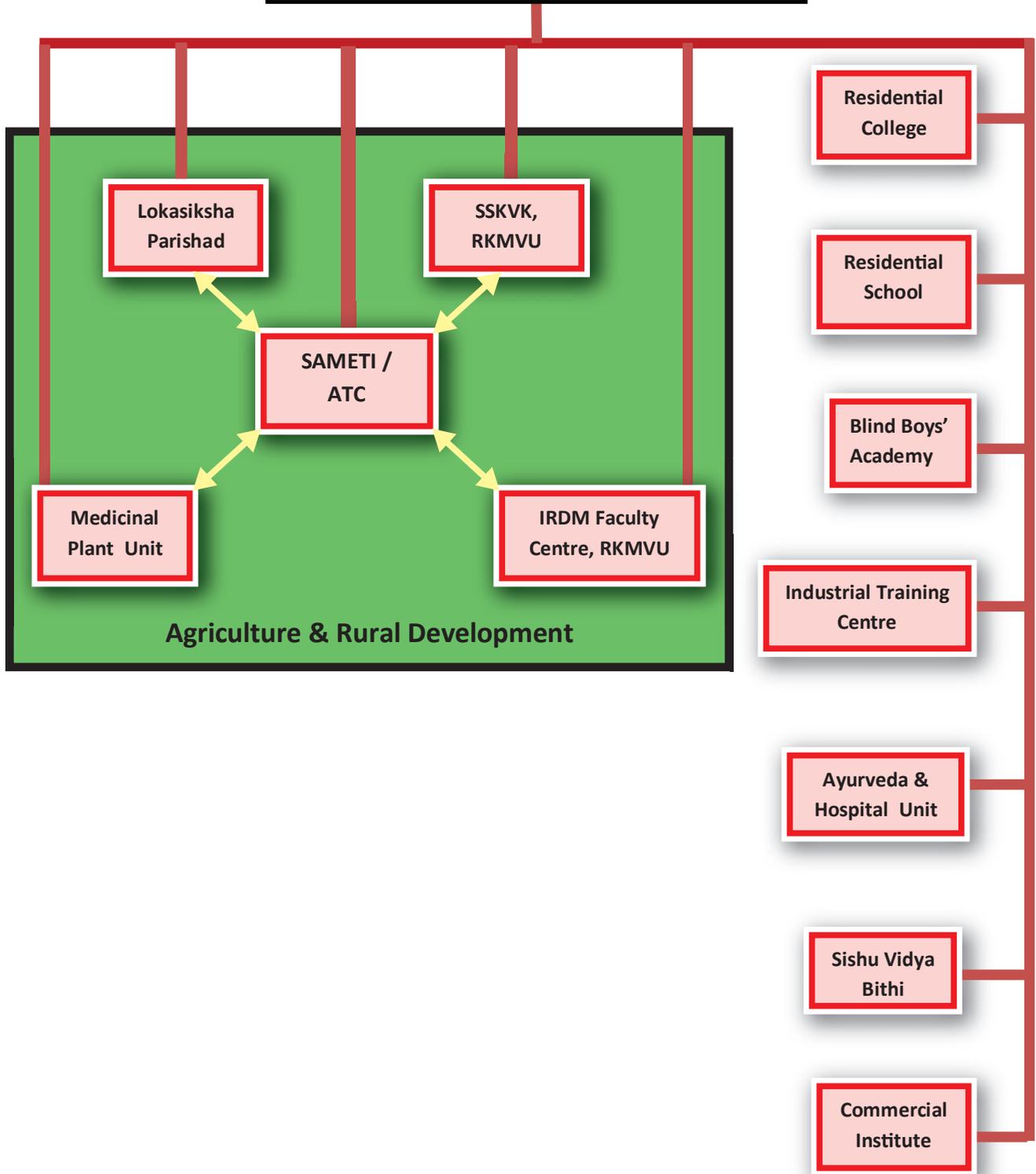
Our Agricultural Training Centre (ATC) and State Agricultural Management and Extension Training Institute is meant for providing these awareness, developing attitude, upgrading skill and knowledge for the clients with the aim of transferring the resources in to the wealth for the development of agriculture and the farming community. During the reporting period (April, 2014- March, 2015) our institute has conducted 134 on-station programme with the participation 3,509 extension functionaries, entrepreneurs, para-extension workers (including agri-input dealers), SHG/ FIG leaders, Cooperative members and progressive farmers from different departments of the Governments, NGOs, Private sectors, Cooperative Societies/ Farmer Producing Organisations etc. Along with these programme, several field training programme, farmers exposure visit, running of extension projects, evaluation programme, organization and participation in agricultural exhibition/ Kissan mela etc. were also important functions. Demonstration of technologies, conduction of trials, quality seed production etc. in farms supported the over all human resource development activities.

The noble work cannot be done alone. Naturally lot of supports from different Departments of State Govt., especially Dept. of Agriculture; linkages with National Institutes like MANAGE, Hyderabad; continuous guidance from Dept. of Agriculture and Cooperation, Govt. of India, SAMETIs of different states, different corporate/Pvt. sectors, NGOs and definitely the farming community. I humbly express my indebtedness to everybody.

The task is mountainous but we are confident that we can go forward all for the cause with the blessings of Sri Ramakrishna, Ma Sarada Debi and Swami Vivekananda.

Manas Ghosh
Principal & Director

Ramakrishna Mission Ashrama, Narendrapur



Introduction

The State Agricultural Management and Extension Training Institute (SAMETI), Narendrapur in Kolkata is now a well known institute to the people of agriculture, animal resource care, fisheries, horticulture and other sectors related to the agriculture and rural development. But development of this SAMETI has a long path of evolution under the guidance of Ramakrishna Mission.

The people used to call the place as Ukhila-Paikpara. It was totally a rural area with low lying paddy and jute field interrupted with patch of jungle and channels of brackish water. The small house at the Pathuriaghata, North Calcutta, was used as 'Home' for the rural students admitted in the colleges of Calcutta. Due to high demand of such shelter for the rural boys and also for migrated students from Bangladesh, the monks of the Ramakrishna Mission shifted the home (1956) in a spacious place towards far outskirts of Southern Calcutta. Later on the school was initiated there. In a part of the Ashrama area, the monks and some development workers used to demonstrate scientific cultivation of different crops to the farmers. Centering that type of demonstration, many farmers used to come to the Ramakrishna Mission for different information on modern agriculture and often orientation/awareness/training were arranged for the villagers. Meanwhile the surrounding areas under the activity of the Ramakrishna Mission was named as 'Narendrapur', after the name of Swami Vivekananda. Seeing the effectivity of such demonstration cum training mode by Ramakrishna Mission for the development of the rural people, Govt. was pleased to offer a 'Gram Sevak Training Centre (GSTC)' to Ramakrishna Mission in the year 1965 along with establishment of seven other GSTCs, directly under the aegis of the Government. The GSTC with a bunch of young motivated workers, with the touch of inspiration of the monks, started their mission of rural development. Along with on campus demonstration and training for the Gram Sevaks (Rural Extension Worker), the trainers traversed villages to address the agricultural problems of the farming community. The GSTC, Narendrapur became a landmark for the rural people of the surrounding districts also. To intensify the activities on agriculture, Govt. specialized the GSTC as the Agricultural Training Centre (ATC) during 1980s. Thousands of farmers, farm youths and grass root level extension functionaries gained skill, developed knowledge and inspired to deliver sincere service.

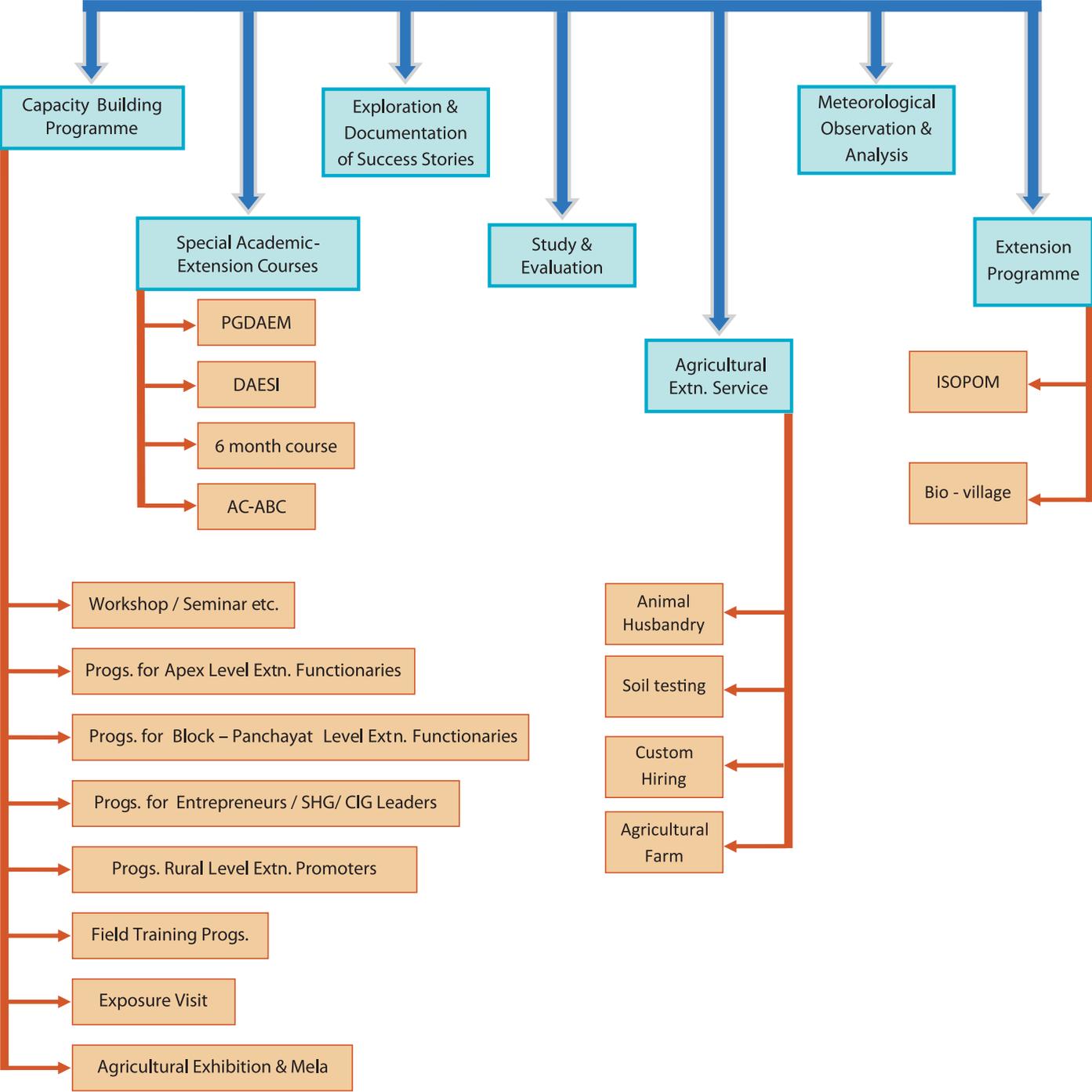
With the start of the new Millennium, the scenario in Indian agriculture changed with a tremendous speed. Justifiably Govt. ventured for reforms in the extension of agriculture. To bear the crucial task of change of attitude, knowledge and skill of the extension functionaries of all sectors related to Agriculture, Govt. nominated the Agricultural Training Centre, Narendrapur as the 'State Agricultural Management and Extension Training Institute (SAMETI)' under Ramakrishna Mission Ashrama, Narendrapur in 2005. Since then crucial development in the mode of delivery of the ATMA scheme occurred with relevant revision and updation in 2007, 2010 and again in 2014.

At present the Institute, is the place of resource of every level of clients in the sector of development in agriculture and allied sectors for the state.

The ATC/ SAMETI is an integral part of the Ramakrishna Mission Ashrama, Narendrapur with the wholehearted support from the State and Central Govt. The atmosphere of the Ashrama imbues the sincerity and devotion within the learner. The advantages of multi academic institutes within the same campus exerts a synergistic effect. Resources sharing among the agriculture and rural development oriented institutes strengthens the delivery.

On the basis of demand and carrying on responsibilities, during the reporting period the institute delivered in many dimensions.

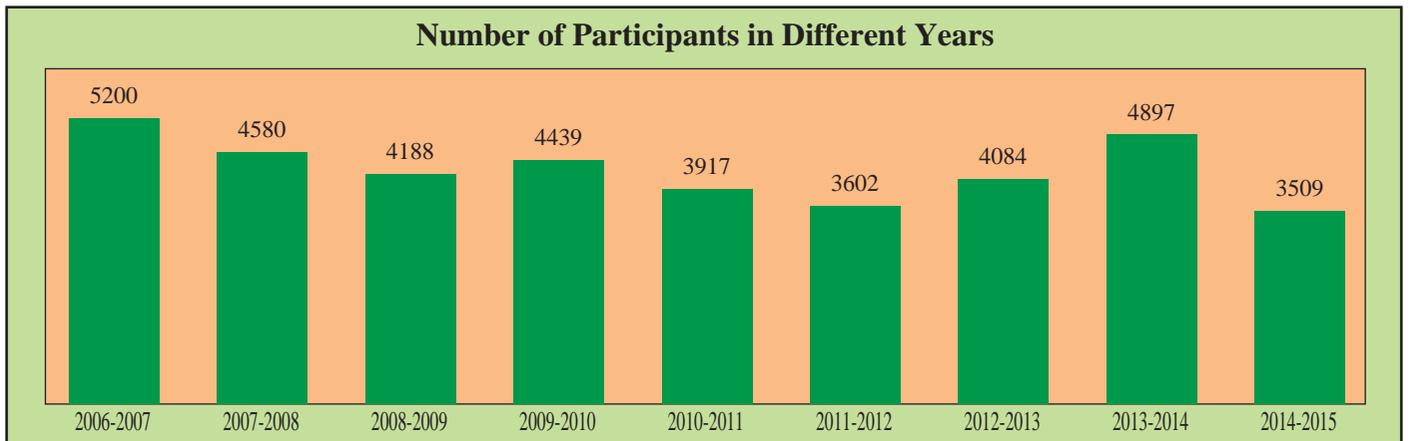
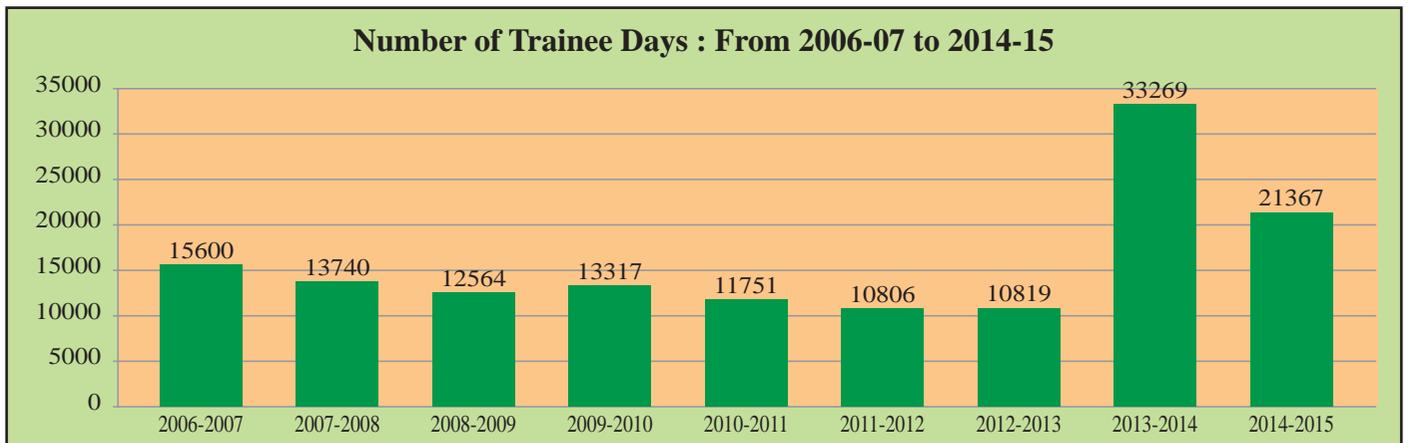
SAMETI / ATC



Performance of the Institute

(FROM 2006-07 TO 2014-15)

Year	No. of Programmes	No. of Participants	No. of Trainee days
2006-2007	106	5200	15600
2007-2008	101	4580	13740
2008-2009	123	4188	12564
2009-2010	141	4439	13317
2010-2011	137	3917	11751
2011-2012	102	3602	10806
2012-2013	104	4084	10819
2013-2014	118	4897	33269
2014-2015	87	3509	21367



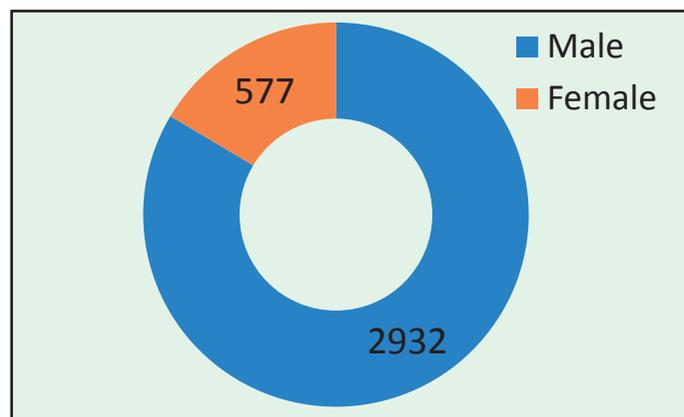
I CAPACITY BUILDING PROGRAMME

The State Agricultural Management and Extension Training Institute (SAMETI) / Agricultural Training Centre, as a part of its core activities, is offering various types of human resource development activities through different level of training courses, seminar, workshop in close co-ordination with the departments of State / Central government and others. The total capacity building programme organized in the financial year 2014-15 can be looked from various angles.

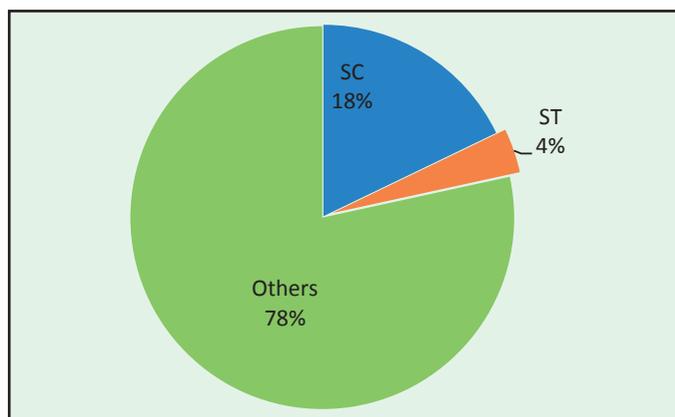
- A. Workshop / Seminar etc.
- B. Programmes for District / Block Level Extension Functionaries
- C. Programmes for Entrepreneurs / SHG / CIG Leaders
- D. Programmes for Rural Level Extension Promoters
- E. Field Level Training Programmes & Farmers' Visit
- F. Agricultural Exhibition & Mela

Sl. No.	Programmes for different level	No. of Programme	No. of participants	No. of Trainee Days
1	Workshop / Seminar etc.	14	1017	1017
2	Programmes for Block / District Level Extension Functionaries	40	1492	5437
3	Entrepreneurs / SHG/ CIG Leaders	7	327	12384
4	Rural Level Extension Promoters	26	673	2529
5	Total (in campus)	87	3509	21367
	Field Level Training	8	330	450
6	Total	95	3839	21817

Share of different categories of participants and programmes



1.1: Male & Female

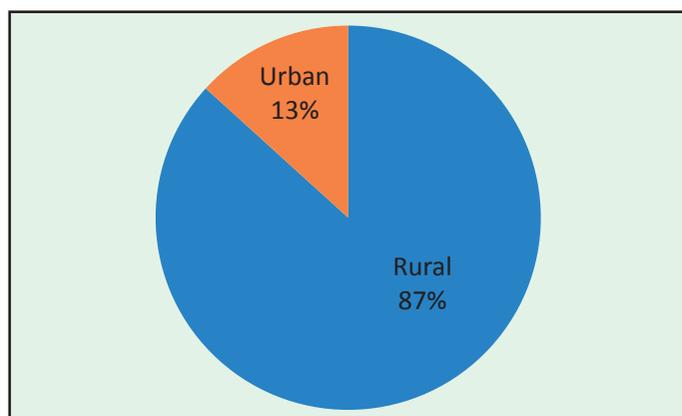


1.2: SC – ST - Others

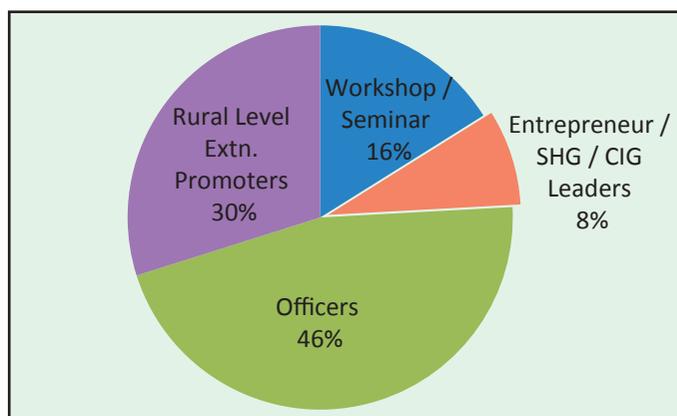
“As long as I live, so long do I learn.”

– Sri Ramakrishna

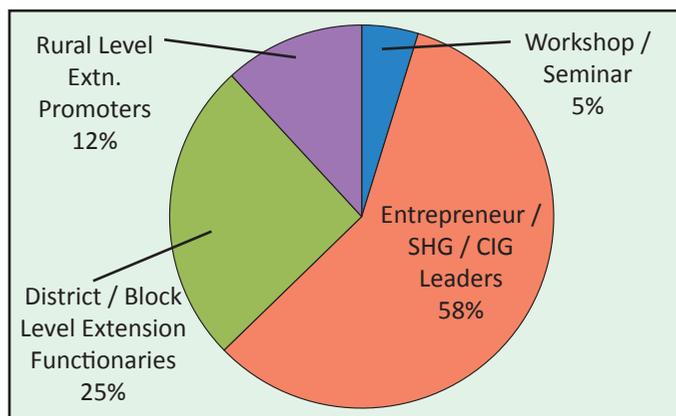
Total Participants in various programmes in 2014-15



1.3: Rural - Urban Participants



1.4: Share of different programme category



1.5: Programme category wise No. of Participants

A. WORKSHOP / SEMINAR ETC.

Seminars / Workshops based on current and need based issues are important programmes performed by the institutes. The major among the programmes are related to different flagship programmers being implemented by the state. A total of 1017 people participated in 14 number of programmes. Programmes at a glance and then given in details are given below:

Sl. No.	Title of the Seminar Workshop	Date	Target Group	Total
1	Workshop on Modified guidelines of different flagship schemes	8 April, 14	DLEF, BLEF	121
2	Workshop on National Mission on agricultural Extension and Technology	3 January, 15	State and district level officers of Agril. and allied Dept.	41

“I tell you one thing - if you want peace of mind, don not fault with others.”

– *Sarada Devi*

Sl. No.	Title of the Seminar Workshop	Date	Target Group	Total
3	Workshop on Extension of Medicinal plant cultivation	30 May, 14	Medicinal plant grower	200
4	IWMP workshop	23 June & 27 June, 14	Implementing agencies	100
5.	Workshop on study issues	26 June, 14	BCKB, IRDM, Extn - Dir, Dir. of All Agrl. Univ	7
6	Review Workshop on DAESI	19 Aug., 14	Input Dealers, Officers, Pvt. sector etc.	80
7	Group Plan workshop on NMOOP and demonstration on Implements	26 Dec., 14	NGO executives - 24 Pgs. (N), 24 Pgs. (S), East Medinipur, West Medinipur	50
8	Extension Functionaries Meet & Reunion	18 Jan., 15	BLEF	62
9	Seminar on Aerial Cultivation	17 Jan., 15	DLEF / BLEF	102
10	Seminar on Sustainable Nutrient Management and use of ICT based Nutrient Expert	30 Jan., 15	Progressive farmers ATMA representatives, BTM, Research scholar	91
11	Workshop on National Mission on Sustainable Agriculture	4 Feb., 15	State and district level officers	65
12	Soil Testing Extension Review Workshop	26 Feb., 15	Soil testing Lab executives	12
13	AC-ABC Review workshop	13-14 March, 15	AC-ABC trainees	86
	Total		14 Progs	1017

* DLEF – District level extension functionaries’ BLEF – Block level extension functionaries’

1. Workshop on Modified Guidelines of Different Flagship Schemes

To achieve a target of desired growth in agriculture in the country, through more productivity, production, higher farm income and quality production and consumption, Govt. of India has launched several flagship programmes. The flagship programmes at the end of the XI-five-year plan have been revised and the guidelines have been published. For orientation to the officers of different districts, a one day ‘Orientation Programme on Modified Guidelines of different flagship schemes and newly



“Let New India a rise-out of the peasants’ cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

– Swami Vivekananda

introductions’ was organized at SAMETI on 8th April, 2014. The new introductions and modified guidelines of the programmes : National mission for sustainable agriculture, Rastriya Krishi Vikas yojona, Submission on agricultural mechanisation, sub mission on agricultural extension, National food security mission, Accelerated development of minor irrigation, National e-governance plan, National crop insurance, National mission on oil-palm, oilseed and pulses etc. were presented by the individual in-charge of the programme. The implications of each programme along with procedure of implementation were also discussed. A total of 121 district / block level officials attended the programme in presence of State Nodal Officers of individual scheme, Directors of Agriculture and Principal Secretary of Dept. Agriculture.

2. Workshop on National Mission on Agricultural Extension and Technology

‘National Mission Agricultural Extension and Technology (NMAET)’ is one of the important centrally sponsored schemes in Mission Mode. On 3rd January, 2015, a meeting was called for review of progress of the NMAET in West Bengal by Govt. of India at SAMETI, Narendrapur. Sri Sanjeev Gupta, Joint Secretary (Extension & IT), Dept. of Agriculture and Cooperation, Govt. of India presided over the meeting. Sri Subrata Biswas, Principal Secretary, Dept. of Agriculture, Govt. of West Bengal was also present. Other officers like: Mr. P. Armorerkar, Director (Extension), Mr. Balaram Singh, Joint Director (Extension–ATMA), Mr. Uma Shankar, Mr. Balasundaram, Deputy Secretary, IT; Ms. Gayatri, Agronomist, etc. joined the meeting, on behalf Govt. of India.



On behalf of Govt. of West Bengal, Dr. Paritosh Bhattacharya, Director of Agriculture & EOS; Sri Subhas Sinha, Joint Secretary; Sri Sourav Paharai, Joint secretary; Sri Jitendra Roy, Deputy Secretary joined the meeting. All the Additional Directors, Joint Directors and Deputy Directors of Head Quarters assembled at the meeting. The Deputy Director of Agriculture (Administration)/Project Director of ATMA from all the districts participated. The meeting mainly focused on the monitoring aspects through electronic system of different schemes, the ATMA in particular. Besides, different other portals were also discussed. The extension wing of DAC of Govt. of India and members of 19 ATMA districts of the state continuously interacted being at their places (New Delhi and different district head quarters) through video-conferencing during the whole workshop.

3. Workshop on ‘Extension of Medicinal Plant Cultivation’

Cultivation of Medicinal plants is a growing area and also a scope of diversification of crops. The demand for medicinal plants is increasing along with awareness among the general mass. A workshop on ‘Extension of Medicinal Plant Cultivation’ was organized by the institute on 30th May, 2014 in collaboration with the Department of Food Processing Industry and Horticulture and also the Medicinal Plant unit of the Ashrama. About 200 farmers and other stake holders of medicinal plant cultivation joined the workshop. Scope in the

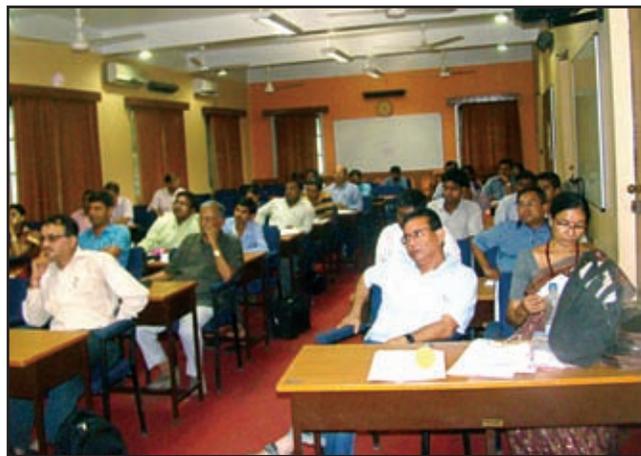
“I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy.”

– *Rabindranath Tagore*

sector of medicinal plant cultivation, its processing and marketing was vividly discussed by experts from the Dept. of Horticulture and Ashrama. Through a group discussion session the farmers decided which plant they will cultivate and accordingly action will be taken for them. Dept. of Horticulture and Facilitating Centre for Medicinal plant will follow up the matter.

4. Workshop on ‘Integrated Watershed Management Programme (IWMP)’

Conservation of water, recharge of ground with water, efficient use of available irrigation water are the three main criteria not only for the agriculture but also for the long term existence of life in the earth. Presently Govt. of India is emphasizing these water related aspects with top priority and for that the ‘Integrated Watershed Management Programme (IWMP)’ is being implemented throughout the country. This programme has got a pace in recent time in West Bengal and for its further speedy implementation, two workshops were organised at SAMETI during 23rd June, 2014 and 27th June, 2014 on ‘Preparation of Detail Project Report’ by the implementing agencies in West Bengal. The Joint



Director of Agriculture (Water Conservation) kept the opening remarks. Observations on different DPRs are critically analyzed by Sri S. N. Lahiri, an Hydrologist and Sri S. Barman, Business Development and Marketing experts. The online Monitoring and Information System (MIS) was discussed in detail by MIS Coordinator of West Bengal State Watershed Development Agency (WBSWDA).

5. Workshop on Study Issues

SAMETI is supposed to conduct study on different extension issues. This year during the need assessment workshop, several study issues were identified. To have a look on those issues for finalizing topic and also to determine the methodologies, experts from different Universities, Zonal Project Director, Directorate of Agriculture etc. were called to a workshop on 26th June, 2014. The issues like identification and documentation of different farming systems in West Bengal, successful Integrated Farming System Model etc. were identified.

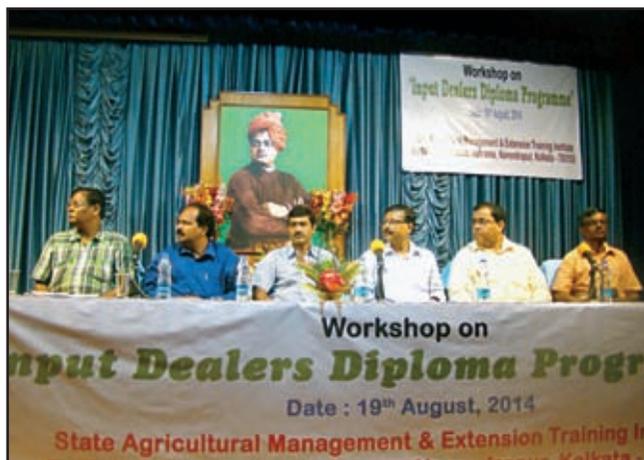
6. Review Workshop on DAESI

It is well known now that the agri-input dealers are the most closely friend of the farmers. Different survey reveals that besides different inputs, farmers also receive advices for their crop protection, soil fertilization, credit etc from the dealer friends. It is observed that there is lot of scope of improvement in advisory services and also scope of improvement of their business through improved technical knowledge.

To fulfill these two sides more purposefully, Govt. of India through MANAGE, Hyderabad has initiated the 1-year Diploma in Agricultural Extension Services for the Input dealers (DAESI). SAMETI, Narendrapur as a Nodal Institute in West Bengal has already started the course for the input dealers of South 24 Parganas district. To evaluate the progress and effectivity of the course and planning for up scaling of the same in next year,

“Science without religion is lame, religion without science is blind.”

– Albert Einstein



a Workshop on DAESI was conducted on 19th August, 2014 at SAMETI. Deputy Directors of Agriculture (DDA), who are in-charge of different agri-input units, DDA Training (Head Quarter), DDA (Administration), South 24 Parganas district, President, Eastern India Crop Care Association (EICA), representative from Zonal Project Director (ZPD), Zone-II, ICAR; Course Coordinator of two DAESI training Institute etc. participated the programme. About 80 agri-input dealers from the surrounding districts and some students of ongoing DAESI course also joined the programme. Dr. N. Balasubramani, Faculty, MANAGE, Hyderabad joined the programme. He presented a brief about the

scheme of DAESI and narrated the impact of the course in all India situation. Deputy Directors of agriculture department focused on the need of such course for the input dealers in the state. The ZPD representative expressed the support of the KVKs to such a programme. The EICA president motivated the dealers to go through such course. Five input dealers, who are going through the ongoing course expressed their learning and about the upgraded status of then after having the input of the DAESI course. Course coordinator of Nimpith KVK narrated about his experience on dealing about the course. It was decided that in the current year four batches of DAESI will run including one at SAMETI and other at Nimpith KVK. Venue of other two will be decided by SAMETI after consultation with the ZPD and Directorate of Agriculture.

7. Group Plan Workshop on NMOOP and Demonstration on Implements

An workshop on farm mechanization related to the NMOOP was organised at SAMETI on 26th December, 2014. In the NMOOP programme there is provision of providing agricultural implements and machineries to the individual farmers and groups. The machineries like power sprayers, seed dressing machine etc. were given to the farmers' group. In the workshop, participated by progressive farmers and NGOs supporting implementation of the NMOOP in the villages, the criteria of support, use of machineries, system of custom hiring possibilities etc. were discussed and process developed. Fifty NGO executives, SHG leaders, progressive farmers etc. from the district of Purba Medinipur, Paschim Medinipur, South 24 Parganas and Bankura joined the programme. Officials from state level from Directorate of Agriculture and also ATMA shared their views in the workshop.

8. Extension Functionaries Meet & Reunion

On the occasion of the 48th Annual Celebration, a meet of the extension functionaries, specially of those, who have been trained from this institute in different time, was organized on 18th January, 2015. Many Krishi Praukti Sahayaks from different districts and other persons attached to the extension activities at their places participated in that meet. The participants exchanged their views and experience on the current agricultural scenario and need of grass-root level extension in agriculture. The ex-trainees of the institute presented their

“The best way to find yourself is to lose yourself in the service of others.”

– Mahatma Gandhi

innovative activities in extension through their volunteer effort. Sri Bhaktikusum Das, Additional Director of Agriculture (General), Govt. of West Bengal guided the session as Chief Guest of the Programme. Sri Sibabrata Ghatak, Joint Director of Agriculture (Plant Protection and Quality Control), Directorate of Agriculture, Govt. of West Bengal addressed the participants as Special Guests. Sri Das narrated the position of the West Bengal in the map of agriculture of India and related the importance of the extension workers in its development. Sri Ghatak appreciated the volunteer work of the alumni of the KPS for the extension of agricultural services. He also encouraged them for further promotion of such work. Sixty two participants from different districts participated the meet.



9. Seminar on ‘Aerial Agriculture’

A Seminar on ‘Aerial Agriculture’ was held at the institute on 17th January, 2015. Dr. Pijush Pramanik, Director of Horticulture, Govt. of West Bengal honored the chair of Chief Guest. Besides Dr. Pramanik, the other important speakers of the seminar were Dr. Harshit Majumdar, Assistant Director of Agriculture, Hooghly District, Govt. of West Bengal and Sri Anirban Chanda, Director, URBAGRO, Kolkata. More than 100 participants including extension functionaries, University students and scholars related to agriculture, progressive farmers etc. joined the seminar. Dr. Pramanik gave the world wide picture of the aerial and urban agriculture and at present time its need in Indian economy. He also showed some initiatives of the Horticulture Dept. in West Bengal. He emphasized the use of aerial space use and multilayer crop culture for the farmers in their field. Sri Majumdar, experimented and ultimately is practicing the roof top garden. He narrated his experiences about the benefit of the roof top garden. Another presentation of the seminar was of the Director of URBAGRO, a private initiative for promotion of Hydroponics created interests of the participants. How fish-water and plants in a system (without any soil, fertilizer etc.) benefit human being, was the main point of discussion.



10. Seminar on ‘Sustainable Nutrient Management and Use of ICT Based Nutrient Expert’

One-day seminar on ‘Sustainable Nutrient Management and Use of ICT Based Nutrient Expert’ was held in collaboration with IRDM Faculty Centre of Ramakrishna Mission Vivekananda University and

“He alone is the true teacher who is illumined by the light of true knowledge.”

– Sri Ramkrishna



the International Plant Nutrient Institute (IPNI) on 30th January, 2015. Renowned scientist and former Vice Chancellor Dr. Saroj Sanyal; Sri Kaushik Majumdar, Director, IPNI; Dr. A. K. Singh, Zonal Project Director, Zone-II of ICAR, Dr. Hirak Banerjee of BCKV, Dr. R. Goswami of IRDM Faculty Centre, Dr. D. Basu of BCKV, Dr. K. R. Saxena, General Manager, Rallis India addressed the participants. Totally 91 participants including agricultural extension functionaries, University scholars, progressive farmers etc. participated the programme.

11. Workshop on ‘National Mission on Sustainable Agriculture’



To spread the message of sustainability of production and productivity along with taking strong step to implement the concept, Govt. of India has launched the National Mission on Sustainable Agriculture (NAMSA). This mission emphasizes on Soil health, Water and soil conservation, Promotion of bio-based input for development of soil and protection of crops and also due emphasis on probable steps for mitigation of climate change on agriculture. On 4th February, 2015 a ‘State level workshop on National Mission on Sustainable Agriculture’ in collaboration with Joint Director of Soil Conservation, Govt. of West Bengal was held at the institution. Sri Subrata Biswas, Principal Secretary, Dept. of Agriculture, Govt. of West Bengal and

Swami Sarvagananda, Secretary, Ramakrishna Mission Ashrama, Narendrapur inaugurated the programme. Joint Secretary, Dept. of Agriculture and Joint Director of Agriculture, Govt. of West Bengal also addressed the participants. Dr. A. Rabindra and Dr. S. Das, experts on behalf of MANAGE, Hyderabad took the main sessions in addition to the experts from the Dept. of Agriculture, Govt. of West Bengal. Overall components of NAMSA and their operationalisation, Rain-fed agriculture and On-farm water management, Soil health management and Climate Change aspects were discussed in detail. The Project Implementing Agencies (PIA) of Rain-fed Agricultural portion presented their planning individually. Totally 65 officers from all the districts of the state participated the programme.

12. ‘Soil Testing Extension Review Workshop’

Soil health is one of the most important issues related to the crop production against the previous concept of only fertility increase. This requires awareness among the farmers along with support system for enquiry about the soil health of the plots of individual farmers. To match this purpose, the institute took initiative to promote five soil-testing laboratories in village areas, organized by the local NGOs. On 26th February, 2015 a ‘Soil

“The brain and muscles must develop simultaneously.
Iron nerves withan intelligent brain – and the whole world is at your feet.”

– Swami Vivekananda

testing extension review workshop’ was organized with the stakeholders of those soil testing laboratories. The executives and the analyst of those NGOs/laboratories participated the workshop. Different problems and developmental issues of soil testing extension through those laboratories were discussed.

13. Refreshers Workshop on AC-ABC

SAMET, as Nodal Training Institution (NTI) has been organizing 2-month professional training programme for the agriculturally educated persons to promote agricultural enterprises as well as agricultural extension activities. During 13-14, March, 2015 a review workshop was organized for all the so far trained candidates to take a stock of their recent status. More than 90 AC-ABC trained candidates from all over West Bengal joined the programme. The successful participants presented their process of success and also the way of tackling problems to avail bank loan etc.



B. PROGRAMMES FOR DISTRICT / BLOCK LEVEL EXTN. FUNCTIONARIES

In this section, the programmes for district/block level extn. Functionaries, dealing with Extension, Management and Technology are discussed. Totally 40 (20 types) such programmes for apex level extension functionaries have been conducted and 1492 Extension functionaries have participated.

Sl. No.	Title of Training to cover the thrust area	Date	Target Group	No. of Course	No. Attended
1.	Orientation on ATMA and its operationalisation – BTM	7-9 April, 16-18 June, 17-19 July, 24-26 Sept., 14; 10-12 March, 15	West Midnapur, Burdwan, Murshidabad, Jalpaiguri, Birbhum, Hooghly, Purulia	5	191
2.	Orientation on Extension Reforms’ for SMS/ ATM	5-7 June, 23-25 June, 14-16 July, 21-23 July, 11-13 Aug., 18-20 Aug., 21-23 Aug., 8-10 Sept., 11-13 Sept., 28-30, Oct. 24-26 Nov., 14	SMS: S-24 Pg, Malda, West Midnapur, East Midnapur, Burdwan, Nadia, Burdwan, Murshidabad – 2 batches, Birbhum, Howrah	11	373
3.	PGDAEM Programme	26-30 May; 1-5 July, 14; 1- 5 Sept, 14; 1-5 Dec, 14	PGDAEM enrolled candidate	4	195

“One should desire of God desirelessness. Desire is the obstacle to liberation.”

– Sri Sarada Devi

Sl. No.	Title of Training to cover the thrust area	Date	Target Group	No. of Course	No. Attended
4.	Orientation of IAS Probationer on HRD	27 May, 14	IAS Probationer	1	8
5.	Training Programme on 'Seed production technology of paddy'	9-14 June, 14	Officers, NGO executives	1	40
6.	Training Programme on 'Women empowerment in Sericulture'	7-11 July, 14	BLEF, DLEF, NGO, BTM	1	26
7.	Training of KCC level-1 staff	7-8, July, 9-10 July & 11-12 July, 14	KCC - staff	3	25
8.	Staff Review	11 April, 14	ATC/SAMETI Staff	1	37
9.	Training Programme on 'Entrepreneurship Development and Group Approaches for Agricultural Development'	21-24 July, 14	DLEF, BLEF	1	30
10.	Training on Seed Certification	30 July-1 Aug., 14	DLEF, Sub-division level	1	51
11.	Master Trainer training on 'ICT based extension through farmers'	25-27 Aug., 14	SAO, SMS, Block,- GP level extn. fn. - KPS	1	17
12.	Training Programme on 'Technologies and Certification procedure for promotion of organic farming'	17-19 Nov., 14	DLEF/BLEF -	1	30
13.	Market led Extension	8-11 Dec., 14	BLEF, KVK, NGO Executives	1	23
14.	Training on National Mission on Oilseed and Oil Palm (NMOOP)	15-16 Dec., 14; 9-10 Feb. & 17-18 March, 15	BLEF, NGO Executives	3	105

"The Man who works for others, without any selfish motive, really does good to himself."

– Sri Ramakrishna

Sl. No.	Title of Training to cover the thrust area	Date	Target Group	No. of Course	No. Attended
15.	Training on Agricultural Knowledge Management: ICT and Knowledge Portals	6-9 Jan., 15	DELFI	1	30
16.	Staff Exposure Visit	13-14 Feb., 15	ATC/ SAMETI Staff	1	24
17.	Inauguration of DAESI programme	16-Oct.,14	DLEF, BLEF & Input Dealers	1	84
18.	DASEI Valediction	18 Dec., 14	DLEF, BLEF & Input Dealers	1	180
19.	Orientation of DFAC and other Non official member	21-22 Oct.,14	Non-official GB of N-24 Pgs.	1	23
Total			40 Prog.		1492

1. Orientation on ATMA and its Operationalisation – BTM

Block Technology Managers (BTM) are at the block level, responsible for implementation of ATMA activities with the guidance of the BTT Convener (Assistant Director of Agriculture). During the financial period five programmes on ‘Orientation on Extension Reforms’ for BTM have been organised with 191 number of participants. The topics of discussion of the programme for the trainees were: Over all management of the team at block level, preparation of Block action plan, electronic monitoring system (EMS), operationalisation of block action plan etc. besides the general concept of ATMA, ATMA activities etc., information on different ongoing schemes, responsibilities of BTM, process of liasoning with agri and allied department and panchayat, etc. Special session on data uploading in ATMA Electronic Monitoring System was also organised.



2. ‘Orientation on Extension Reforms’ for SMS/ATM

Recruitment of the ATMA functionaries is going on in different districts. After recruitment, orientation of the newly recruited persons is very crucial for their maximum output as well as the smooth functioning of the Scheme. SAMETI as the State level nodal training institute has been organizing the orientation programme of the newly recruited persons. The Subject Matter Specialist, recently re-designated as the Assistant Technology

“You can’t cross the sea merely by standing and staring at the water.”

– Rabindranath Tagore



Manager (ATM) at block level is for grass root level extension workers and the Block Technology Managers (BTM) are their supervisors at the block level, are responsible for implementation of ATMA activities with the guidance of the BTT Convener (Assistant Director of Agriculture). During the financial year 2014-15 eleven programmes on 'Orientation on Extension Reforms' for SMS/ATM have been organised with 373 number of participants. The topics of discussion of the programme for the ATM/SMS were: different schemes of agri and allied dept., preparation of block action plan, basics of extension, particularly related to organizing training, demonstration, farmers group etc. along with general concept of ATMA and its operationalisation, record keeping and data entry and role and responsibilities of SMS/ATM.

3. PGDAEM Programme

For knowledge, skill and attitudinal changes towards accommodating the current agricultural situations, the Post Graduated Diploma in Agricultural Extension Management (PGDAEM) course initiated by MANAGE-GOI through the SAMETI. For the 2013-14 batch, session starting from March, 2014, 53 officers have enrolled in the course from different departments like Agriculture, Animal Resource Development, Fishery, Horticulture, Marketing, Krishi Vigyan Kendra etc. During this financial year contact classes and term end examinations for both Semester I and Semester II were organized. The details of PGDAEM course is given in Chapter II, 'Special Academic-Extension courses'.

4. Orientation of IAS Probationers

Eight IAS probationers were sent to SAMETI on 27th May, 2014 to have an orientation on the human resource development process of the institute along with ideas of activities in the sector of agricultural development. After an interactive session, the probationers were taken to the agricultural farms, dairy farms, medicinal plant garden and integrated rural development faculty campus. The Secretary of the Ashrama, Swami Sarvagananda gave them orientation about the ideology and activities of Ramakrishna Mission.

5. Training Programme on 'Seed Production Technology of Paddy'

Disseminating the technology of quality seed production, particularly, for the crops widely sown in the state, is a step towards making the state self sufficient in seed materials. With this aim, a training programme for the members of FIG of South 24 Parganas was arranged at SAMETI on 'Seed production technology of paddy' during 9-14 June, 2014 in collaboration with Sasya Shyamala Krishi Vigyan Kendra. Faculty members of SAMETI and SSKVK along with experts from State Seed Certification Office, Tollygunj took different sessions. Along with the seed technology, other new technologies for paddy like, Drumseeder sowing Technology, concept of seed village programme, pests of stored seeds etc. were also discussed. A session on gender sensitization was also kept for the trainees.

“Finish the few duties you have at hand, and then you will have peace.”

– Sri Ramakrishna

6. Training on ‘Empowerment of Women in Sericulture’

For the desirable growth and development of India, the women section must be given its due importance. The section must be empowered in different sectors, particularly where their participation is significant. Agriculture is such a sector, where mainstreaming of the women section is highly essential for its desirable development as the women folk contributes to a considerable degree. At Govt. level the process is being emphasized, particularly in the part of human resource development to generate awareness among different stake holders of development. During 7-10 July, 2014 a programme was organized on ‘Empowerment of Women in Sericulture’ for the extension functionaries of the Directorate of Sericulture,



Govt. of West Bengal was organised in collaboration with MANAGE, Hyderabad. Ms. Soma Bhattacharjee, IAS, Commissioner, Dept. of Textile and Sericulture, Govt. of West Bengal inaugurated the programme. Dr. K.Umarani, Director, MANAGE, Hyderabad; Ms. Poetry Dutta, Advocate, High Court, Calcutta; Sri Pranab Kumar Basu, Joint Director of Sericulture, Govt. of West Bengal and number of faculties of SAMETI conducted different sessions. The participants were discussed with the topics like: Use of participatory techniques - PRA tools in gender issues in agriculture; Group formation in sericulture, Sericulture as enterprise of livelihood, Women rights, Gender analysis, Analysis of gender needs, Gender budgeting, Strategies for mainstreaming gender etc. A half day exposure visit was made among women groups in villages of Sonarpur block. Twenty six extension officers from sericulture sector from all over West Bengal participated the programme.

7. Training of KCC Level-1 Staff

To facilitate the farmers, in every state, Govt. has created an opportunity of a toll-free calling to experts on any problems on agriculture in the name of ‘Kissan Call Centre (KCC)’. The Kissan Call Centre is now said to be the heart of farmers’ communication. Farmers from any corner of the state may ask for probable solutions in their local languages. The experts (Level-1), on the other hand, are a band of educated team in the sector of field crop, horticulture, animal husbandry, fishery, sericulture etc., use to receive the calls and communicate the farmers with solutions instantly from their knowledge, or consulting knowledge-portals or transfer the call to the 2nd level of experts (University faculty etc.). This system of farmers



problem solving process has become very effective and popular. As agriculture is a very dynamic subject and new technologies are coming for specific region on regular basis, continuous updating of the Level-1 experts

“All the wealth of the world cannot help one little Indian village if the people are not taught to help themselves”

– Swami Vivekananda

is essential for quality services for the farmers. After organizing a need assessment workshop for the KCC experts, three 2-day training programmes were organized at SAMETI for total 24 experts (West Bengal & Sikkim) in three batches on 7-8 July, 9-10 July and 11-12 July, 2014 targeting problems to be encountered during kharif season, 2014. A total of 25 Level I experts attended the courses.

8. Staff Review / Orientation

A staff orientation workshop for the staff member of the institute was held on 11th April, 2014. Staff members presented their opinion towards development of the institute as well as related issues in that respect. Revered Swami Sarvaganandaji Maharaj, Secretary of the Ashrama, presided over the meeting and inspire the staff members through his speech and interaction.

9. Entrepreneurship Development and Group Approaches for Agricultural Development'



By utilizing the capacity of the rural unemployed youths and progressive farmers, Govt. has been emphasizing on the formation of agriculture-based entrepreneurship. This will not only mobilize agricultural produce in to products, but also lot of rural employment will generate to boost up the rural economy. During 21st- 24th July, 2014, a 4-day programme on 'Entrepreneurship development and group approaches for agricultural development' was organized at SAMETI in collaboration with Extension Education Institute (EEI), Jorhat, Assam. About 30 block level extension functionaries, mainly the Block Technology Managers from the district of South 24 Parganas, North 24 Parganas and Purba Medinipur

participated the programme. The experts from EEI, Jorhat and SAMETI, Narendrapur conducted different sessions on: Significance of entrepreneurship in agriculture, Skills and qualities of good entrepreneurs, Steps in establishing an enterprise, Prospects and constraints of developing agri-entrepreneurship in West Bengal, Govt. Schemes for developing agri-entrepreneurship, Financial analysis of entrepreneurship, Relevance of group approach in agricultural extension, Steps in formation of Commodity Interest Groups in Extension Reforms, Social and economic cost benefit analysis etc. A field visit and interaction with the entrepreneurs was also organized. A session on mainstreaming gender was also taken by SAMETI faculty.

10. Training on Seed Certification

Seed is probably the most vital input of agriculture. Without quality seed, none can assure a good productivity, whatever capital investment may be done. West Bengal is a state gradually taking speed in production and productivity of different crops and to be self sufficiency in quality seed production. To initiate a state wide drive towards quality seed production, a programme on 'Seed Certification' was organized in collaboration with the Office of the State Seed Certification, Directorate of Agriculture, Govt. of West

Men are more valuable than all the wealth of the world

– *Anonymous*

Bengal during 30th July to 1st August, 2014. The Assistant Director of Agriculture (Subject Matter) from all most all subdivisions of all the districts joined the programme. The sessions of the programme mainly focused on: Concept of quality seeds, Steps in Seed Certification, Hybrid paddy seed certification technology and steps, Technology for seed certification of maize, potato, jute, pulses and oilseeds etc. Exposure visit were done in seed production fields and seed testing laboratories. Experts from the Directorate of Agriculture, Universities and SAMETI etc. took different sessions. A Total of fifty one officers attended the programme.



11. Master Trainer Training on ‘ICT Based Extension Through Farmers’

With change of time, the mode of communication is changing with very high speed. The advantage of these changes is reflected in every sphere. In case of agriculture, the advantages of information and communication technology is intermingled with the development tools. The extension system in agriculture is highly empowered with this ICT. Govt. of India and Private sector have brought different innovations and success to reach to the root more efficiently with considerably less time. The Kissan Call Centre, Common Service Centre, Voice message and other different tools have given the chance of bringing the World at the door step of the farmer. Unfortunately a large portion of the farming community is still not aware of all these advantages. To bridge the gap in the state a ‘Master Trainer Training on ICT based Extension through Farmers’ is arranged during 25-27 August, 2014 at SAMETI. After primary orientation by the authority level staff of Kissan Call Centre, Common Service Centre and Iffco Kissan Sanchar Limited (voice message), the participant of the training are made exposed to the village Kiosk - Tathya Mitra Kendra and also the Kissan Call Centre head quarter cum operation house. The participants interacted with the operators in all the cases and also with the surrounding people about the facilities. In this connection the ‘ICT enabled extension for farmer (Matir Katha)’ the initiative of the Dept. of Agriculture of West Bengal was also presented by the WEBEL representative to show the concept and usefulness to the farmers. Seventeen extension functionaries from Dept. of Agriculture, ATMA and KVKs participated the programme.

12. ‘Technologies and Certification Procedure for Promotion of Organic Farming’

Sustainability of the productivity of the agricultural crops is the issue of the time, particularly when Indian population is going to cross 130 crore within few years. In this relation, soil health and environmental safety/ ecological balance etc. are also the main concerns of the time. By one school, it is being said that organic farming may be one of the solutions. Organic farming is gradually gaining popularity with the consciousness among the farmers as well as among the consumers. Recently a 3-day training programme on

“Be the change that you wish to see in the world.”

– Mahatma Gandhi



‘Technologies and Certification procedure for promotion of organic farming’ by the institute in collaboration with the Extension Education Unit of North Eastern States during 17-19 November, 2014. Dr. A. K. Bhattacharyya, Dr. R. Baruah, both from, EEI Jorhat along with faculties of SAMETI and experts from Certifying agency took different sessions on: Quality control of biofertiliser as component of organic farming, Different methods of composting, Organic produce standard, Process of organic farming and certification, Liquid manure for organic farming etc. Thirty Govt. extension functionaries from Dept. of Agriculture and allied sectors and NGO executives from different districts joined the programme.

13. Training on ‘Market Led Extension’



Market, means remunerative price of agricultural products to the farmers, is the most important agricultural issue of recent time. Farmers should grow the produce, which has direct market with remunerative price. But the question is how to establish the mechanism. One of the most prominent answers is ‘Market led Extension’. A training programme on ‘Market led Extension’ for the extension functionaries was conducted in collaboration with the MANAGE, Hyderabad during 8-11 December, 2014 at SAMETI. The main objective of the training was to orient the trainees about the scenario and process of extension directly related to the agricultural market. Dr. K. C. Gummagolmath along with experts from

University, SAMETI, Private agency, MCDX etc. took different session on: Scenario of agricultural market and reforms, WTO and its challenges to Indian agriculture, New Agricultural marketing policy of West Bengal, ICT in market led extension, Direct and Future marketing etc. A field visit was also conduct for the trainees to Tona village, where production along with marketing is being done by the groups of a village in North 24 Paraganas. Nineteen participants from different districts joined the programme.

14. Training on National Mission on Oilseed and Oil Palm (NMOOP)’

A 2-day ‘Officers Training on National Mission on Oilseed and Oil Palm (NMOOP)’ was organized at SAMETI during 15-16 December, 2014. More than 50 officers from the districts of the South Bengal participated the programme. Sri Bhakti Kusum Das, Additional Director of Agriculture (General) presided

“Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.”

—1st Earl of Chatham, William Pitt

over the inaugural programme. Experts from the research wing of the Directorate of Agriculture of different research institutes and Universities discussed different aspects like NMOOP and its execution, Problem and prospect of oilseed cultivation in West Bengal, Future Agro-technologies, Seed production aspects, Disease and pest management, Role of opinion leader in farmer extension etc. Four progressive farmers also shared their experience about the implementation of ISOPOM programme. Two another such programmes were also organized on NMOOP during 9-10 February, 2015 and 17-18 March, 2015. The details of ISOPOM/NMOOP programme is given in Chapter VII, 'Extension Programme'



15. Training cum Workshop on 'Agriculture Knowledge Management, ICTs and Knowledge Portals'

The advancement of information technology within last 15 years, perhaps has created most contrasting impact in human life. Mobile phones and its different applications along with use of computer and internet have changed the individual lifestyle. ICT created tremendous opportunity in every development sector including agricultural extension system. During 6-9 January, 2015 a Training cum Workshop on 'Agriculture Knowledge Management, ICTs and Knowledge Portals' was organised in collaboration with the National Institute for Agricultural Extension Management (MANAGE), Hyderabad for the district level extension functionaries of the state. The topic of discussion during those four days were: Agricultural extension model,



Status of application of ICT in agriculture in West Bengal and India, Different Farmers' Portal, Electronic Monitoring System of ATMA and its operationalisation, Kissan Call Centre and mobile message services, Use of Remote sensing and GIS in Agriculture, Role of National Informatics Centre and AGMARKNET portal etc. Besides, the participants were on a half day visit to the National Bureau of Soil Survey and Land Use Planning (NBSSLUP) of ICAR to learn about the use of remote sensing and GIS in agriculture. Dr. K.V. Rao from MANAGE, Sri Amitava Bose from NIC, Sri Subol Das from Govt. of West Bengal, Sri Chanchal Majumdar from IKSIL, experts from NBSSLUP, farmers portal expert from Jharkand ATMA and SAMETI faculties oriented the participants in the above-mentioned topics. Totally 30 participants from all the districts participated in the programme.

"Agriculture is the noblest of all alchemy; for it turns earth, and even manure, into gold, conferring upon its cultivator the additional reward of health."

— Paul Chatfield

16. Staff Exposure Visit

The staff members of ATC/ SAMETI were on an exposure visit to different agricultural and allied activities at Purba Medinipur during 13-14 February, 2015. The floricultural activities by the FIGs in Kolaghat area, Nursery business and scientific fish culture in the surrounding area of Tamluk, brackish water fish capture, processing and marketing in Digha areas were exposed to the staff members. In the evening of 13th February, 2015, a discussion session was held on how to improve work efficiency within an organization. Director, SAMETI conducted the session and all the staff members on the visit exchanged their views and suggestions. The staff members also enjoyed the visit to the sea of Digha.



17. Inauguration of the DAESI Course

A State level workshop was held on 19th August, 2014 on the programme 'Diploma in Agricultural Extension Service for the input Dealers (DAESI)' with the participation of the all stake holders. While reviewing the course, the effectivity and high enthusiasm was observed and it was decided that the course will be held for 2014-15 for four batches; two for the Input dealers of the South 24 Parganas and other two for two other districts. Selection for the South 24 Parganas, on the basis of application received, totally 81 candidates are selected (41 for Narendrapur centre and 40 for Nimpith centre). The Inauguration of the DAESI course was held on 16th October, 2014 with the overall orientation about the DAESI course to all 81 enrolled input dealers from South24 Parganas district.

18. Valediction Programme – DASEI



The Valedictory of the first batch of DAESI–2013-14 (Diploma in Agricultural Extension Service for Input Dealers) was held on 18th December, 2014 at SAMETI. The first batch of DAESI started on 24th August, 2013 for the input dealers of South 24 Parganas on pilot basis in collaboration with MANAGE, Hyderabad. Primarily the course was initiated on two batches: one at SAMETI, Narendrapur for 37dealers and another at KVK, Nimpith for another 40 dealers. All 77 candidates successfully completed the course, among which 76 got first division and 45 with distinction. On that occasion a 'Brochure' on first batch of DAESI was also published.

In the valedictory programme, Dr. Pradip Majumdar, Advicer to the Chief Minister on Agricultural Aspects presided over the function and distributed the certificates among the successful candidates. Sri Sibabrata Ghatak, Joint Director of Agriculture (Plant Protection and Quality Control), Govt. of West Bengal and Sri

“Anyone who has never made a mistake has never tried anything new.”

– *Albert Einstein*

Asish Lahiri, Deputy Director of Agriculture (Administration), South 24 Parganas, Govt. of West Bengal were also present as special guests of the programme. Sri Jayanta Chakraborty, President of Eastern India Crop Care Association also present in the function as Special Guests.

Besides the passed out candidates, 81 freshers of DAESI of 2014-15 batch were also present. In the beginning, the two course coordinators of the two centres expressed their experiences about the course and also about the transformation of the input dealers gradually during the course.

Six passed out input dealers shared their experiences about the course and the benefit they are receiving in terms of advice to the farmers and their business.

Sri Majumdar in his speech told about the importance of the course at present and future and also encouraged the other dealers to join the course. Joint Director of Agriculture (PPQS) told about the benefit of the dealers, who are directly offering advice to the farmers and intern their business increases on the effectivity of the advice. Sri Lahiri, the Deputy Director of Agriculture told that the passed out dealers will be considered for extension functionaries for conducting training, demonstration etc.

19. Orientation of District level Farmers Advisory Committee (DFAC)

Participation of all level of stake holders in planning and implementation is one of the features of the modified extension reforms through out the country. The Extension Reforms Scheme, which is popularly known as ATMA, has been considered in Mission Mode and now it is named as the ‘Sub Mission on Agricultural Extension (SAME)’. In the revised guideline of the scheme published recently, emphasis has been given in the formation of the District level Farmers Advisory Committee (DFAC). The members of DFAC are required to be oriented about the scheme, their role and responsibilities for the scheme at district level. During 21-22 October, 2014, an orientation programme for the members of the DFAC of the North 24 Parganas was organized. General concept of extension and ATMA scheme, status of ATMA in that particular district, Role and responsibilities of the Farmers representative, strategies of involvement of Farmers’ representatives at block and district level etc. were discussed in interactive and group discussion mode. Nineteen participants associated with the DFAC joined the programme.

C. PROGRAMMES FOR ENTREPRENEURS/SHG/CIG LEADERS

In this section, the programmes for Entrepreneurs/SHG/CIG Leaders, the major courses conducted are-Diploma in Agricultural Extension Services for Input Dealers, AC- ABC, Training of Prani Bandhu on ‘Artificial Insemination of Cows for Better Productivity’, Training of ARD extension worker on ‘Artificial Insemination and advance Cattle Rearing’. A Total of 53 Programmes were organised with 327 trainees.

Sl. No.	Title of Training to cover the thrust area	Dates	Target Group	No. of Courses / Progs.	Total
1	Diploma in Agricultural Extension Services for Input Dealers	27 th Aug., 13 - 26 th Aug., 14	Enrolled Input Dealer	2 *	80

“Let New India a rise – out of the peasants’ cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

– Swami Vivekananda

Sl. No.	Title of Training to cover the thrust area	Dates	Target Group	No. of Courses / Progs.	Total
2	AC- ABC	16 th Oct -12 th Dec,14; 8 Dec.,14 - 5 Feb.,15	Agri-preneur	2	66
3	Training of Prani Bandhu on ‘Artificial Insemination of Cows for Better Productivity’	7 th Nov.,14 - 22 nd Dec., 14 & 26 th Dec., 2014 - 9 th Feb, 2015	24 Pgs.(S) & Coochbehar, Bankura, Hwh., Hooghly, Paschmin Mid.	2	117
4	Training of ARD extension worker on ‘Artificial Insemination and advance Cattle Rearing’.	15 th Feb. - 31 st March, 2015	Prani Bandhu	1	64
Total			7 Progs.		327

* 80 candidates in 2 batches attended 48 days classes (once in a week)

1. Course on Diploma in Agricultural Extension Services for Input Dealers



The 1-year course, ‘Diploma in Agricultural Extension Service for the Input Dealers (DAESI)’, for up-gradation of knowledge of the input dealers for the session 2014-15 is continuing for the 81 candidates in 2 batches of the district of South 24 Parganas. The input dealers use to come once in a week to their designated centres and have the lessons from class room and from the standing crops being in the filed/ farm on the package of practices of the crops. Besides the knowledge about crops, other aspects related to agriculture and agri-input business are also included in the course. The details of DAESI course is given in Chapter II, ‘Special Academic - Extension Courses’

2. Training on Agri-Clinic and Agri-business Centre

The 4th batch and 5th batch of the Agri-Clinic and Agri-business Centre course started from 15th October, 2014 and ended on 13th December, 2014 and 8th December, 2014 to 5th February, 2015. Totally sixty six candidates, thirty five candidates in 4th batch and twenty nine candidates in 5th batch joined the programme. Candidates were from the district of Purulia, South 24 Paraganas, Bankura, Birbhum, Purba Medinipur

“Do not afraid; the Master is behind you, and I am, too, as your Mother”

– *Sarada Devi*

etc. The trainees had gone through different aspect of agricultural technologies, entrepreneurship development agricultural business and finally came out with a bankable business project. The details of AC-ABC course is given in Chapter II, ‘Special Academic - Extension Courses’.

3. Training of Prani Bandhu on ‘Artificial Insemination of Cows for Better Productivity’

Up gradation of breed of cattle for higher milk production is one of the important programmes in the Animal development sector of West Bengal. In this mission numbers of knowledgeable and skilled persons are required. The Animal Husbandry Unit of the Institute in collaboration with the Animal Resource Development sector of Govt. of West Bengal is in the process of development of human resource, particularly the extension functionaries for this particular programme. One hundred and seventeen trainees from the district of Purba Medinipur, Coochbehar, Bankura, Howrah, Hooghly and Paschim Medinipur were in two 45-days courses on ‘Artificial Insemination of Cows for Better Productivity’ during 7th November - 22nd December, 2014 and 26th December, 2014 - 9th February, 2015. The courses



deals with both practical and theoretical teaching on the aspects of animal physiology, reproductive system of cow, process of artificial insemination, dealing with frozen semen, maintenance of pregnant cow, feed management of AI cow and up graded calf etc. Besides, immunization through different vaccine and disease management are also part of the course.



4. Training of ARD Extension Worker on ‘Artificial Insemination and Advance Cattle Rearing’

Development of the animal husbandry sector is one of the ways to accelerate the growth of agricultural sector. This is also important in view of the nutrient security of the mass. The local Indian breeds are naturally selected and fitted for the respective areas. But the disadvantage is the low yield capacity of these local breeds. To match the adaptations with local climate as well as higher production, the technology of up gradation of breed of the cattle is essential. In the state of West Bengal this process is going on mission mode. Under the patronage of the department of animal resource development, a special cadre in the name of ‘Prani Bandhu’ has been created. These Pranibandhus are the rural youths with basic knowledge of cattle rearing. The selected candidates are trained through a 45 days course on ‘Artificial Insemination and advance Cattle Rearing’. The

“As long as I live, so long do I learn.”

– Sri Ramakrishna

dairy unit of the Ashrama, run by the experts of the institute has been selected as the training centre for these 'Pranibandhu' for its technical and management excellence. During the year one course for 64 candidates for the youths of Birbhum, Howrah, Hooghly and North 24 Parganas from 15th February, to 31st March, 2015 was conducted.

D. PROGRAMMES FOR RURAL LEVEL EXTENSION PROMOTERS

Sl. No.	Title of Training to cover the thrust area	Date	Target Group	No. of Course	Total
1.	Skill based entrepreneurship development: Vermi composting	17-18 July, 14, 11-12 Sept., 14, 21-22 Oct., 14	Rural youths, NGO, Entrepreneur	3	59
2.	Skill based entrepreneurship development: Production of fishery by products & its utilizations	30 July - 1 Aug., 14	Unemployed women	1	23
3.	Skill based entrepreneurship development: Trg. on Mushroom Production	2-4 July, 20 Sep., 30 Oct., 13-14 Nov., 20 Dec., 14	Rural youths / entrepreneur	5	118
4.	Value addition on horticultural crops:	19 to 21 May, 14	SHG, FIG members	1	15
5.	Propagation of horticultural crops	5-7 June, 14	Progressive Farmers and entrepreneur	1	9
6.	Training on Animal Husbandry	12-18 May, 14 & 23-29 May, 14	Rural Youth	2	47
7.	Farmers Training on Advanced Technology	2-6 April, 19-23 May (2 progs.), 5-9 May, 12-17 May, 14	Progressive farmers, SHG, FIG members	5	150
8.	Piggery management & Ornamental Bird rearing	7-9 Aug, 14 & 24-28 June, 14	Rural entrepreneur	2	52
9.	Friends of Coconut Trees:	7-12, July 18-23 Aug., 27 Oct-1 Nov., 15 Dec., 14	Coconut growers : South 24 Pgs.	4	132
10.	Seed production	11-16 Aug., 14	Progressive Farmers', FIG	1	38
11.	Training on Pearl & Oyster culture	24-26 Nov., 14	Progressive fishermen	1	30
Total			26 Prog		673

"I tell you one thing - if you want peace of mind, don not fault with others."

– Sarada Devi

1. Skill Based Entrepreneurship Development: Vermi Composting Training

The farmers are now gradually giving importance on using organic matter for better health of the soil and so better crop yield. One of the main constraints is availability of quality organic matter. In recent years, the Vermicomposting technology has given the farmers way of acting towards soil health management and many farmers are now coming forward for this technology to save their soil for sustainable production. During 17-18 July, 2014, 11-12 Sept, 2014, 21-22 Oct, 2014 some rural youths from different corners of the State with a mindset of entrepreneurship development came to SAMETI for training on technology of vermin composting with an aim to make rural business by production and selling vermicompost to their surrounding farmers. The technology was demonstrated and various steps practiced along with tips on entrepreneurship development. At the end of the training, the participants were provided with some vermin culture so that they can initiate their ventures. A total of 59 trainees attended these three training programmes.

2. Skill Based Entrepreneurship Development: Production of Fishery by Products & its Utilizations

Demand for consumption of fish is increasing day by day. Side by side the area of fish production is decreasing day by day and the cost price of fish is increasing. To increase the productivity of fish is one of the solutions to resolve the crisis. Keeping this idea a 3-day training programme was organized for the entrepreneurs of fish culture on 30th July - 1st Aug, 14. Resource persons from KVK, University, local established entrepreneur took different sessions on fish production, fish feed production, pond preparation, disease management, fry-fingerling management etc. were discussed during the training programme. The trainees were also taken to Central Institute of Freshwater Aquaculture (CIFA), Barrackpore for field level demonstration. A total of twenty three fish-entrepreneurs joined the programme.



3. Skill Based Entrepreneurship Development: Mushroom Production

This is a good trend that rural youths are coming forward for agricultural entrepreneurship development. Mushroom is one of the sectors, which receives preference by the rural youths for this purpose. During the financial year, five training courses on Mushroom culture and entrepreneurship development were conducted. The training was performed mainly through practical and with inputs on entrepreneurship development including preservation and marketing. The skill of cultivation of mushroom made learnt by the group members and after the training each members were provided with spawn along with poly bags etc. for practicing the same returning their house. A total of 118 trainees attended the five programmes.

“Let New India a rise-out of the peasants’ cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

– Swami Vivekananda

4. Training on ‘Value Addition of Horticultural Crops’

Adding value to the raw agricultural produces is one of the ways to satisfy the customer more and also to get higher price. Lack of remunerative price is a common complain from the farmers. To combat the situations often the recommendations are: add value to the produce and then sale it. To reach the farmers with the concept, meaning and ways of value addition, a 3-day training programme on ‘Value addition of horticultural crops’ for the progressive farmers, NGO persons and SGH leaders was organized by Sassya Shayamala KVK in collaboration with SAMETI during 19-21 May, 2014. Topics like improving quality by value addition, post harvest management of horti crops, poly house culture, preservation of fruits and vegetables, Good agricultural practices different horticultural crops, off season vegetable cultivation, Multitier vegetable cultivation etc. were discussed and also practiced where feasible. Fifteen farmers, mainly from South 24 Parganas district participated the programme.

5. Training Programme on ‘Propagation of Horticulture Crops’

A 3-day training programme on ‘Propagation of horticulture crops’ was organized during 5-7 June, 2014 for a group of farmers of nine in number. This was mainly aimed at joint group activities by the farmers for raising quality seedlings of crops and ornamental plants for their won as well as for additional income generation.

6. Training on Animal Husbandry

Better livelihood generation though animal resource development is increasing gradually. To meet up the demand, resource persons are needed at village level. To bridge the gap, rural youths are being trained through long term courses. As the dairy of the Ashrama is good enough not only for exposure but also for practical training; the trainees in different batches are getting seven days practical exposure on maintenance of dairy, breeding, sanitation, disease management, fodder cultivation etc. During financial year 21 and 25 candidates in two batches have trained fully on practical aspects of animal husbandry during 12-18 May and 23-29 May, 2014 respectively. A total of 47 rural youths attended these two programmes.

7. Farmers Training on Advanced Technology

Govt. of West Bengal, Agricultural Dept. has taken a step to orient the farmers through a formal 5-day course for all the advancement happening in the sector of agriculture. Different up dated farm technologies like cultivation practices of pulses and oilseeds, SRI and drum-seeder technologies of rice culture, vermicomposting, upgrading of fruit trees through grafting, non-chemical pest management concept, efficient water utilization in plants, Mushroom cultivation etc. are included in the 5-day training module on the basis of their need. The course includes concept building and practical/ demonstration and exposure visits. During 2014-15 five such courses have been conducted with 150 progressive farmers.

8. Training on Piggery Management & Ornamental Bird rearing

Two different training programmes organised on Piggery Management & Ornamental Bird rearing. A 3-day training on (7-9 Aug, 2014) ‘Piggery Management’ and a five-day training on (24 -28 June, 14) ‘Ornamental

“I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy.”

– *Rabindranath Tagore*

Bird Rearing’ were arranged for the rural youths, who want to establish themselves through piggery farming and Ornamental Bird rearing. Different aspects of piggery management like: breed, feed, shelter, health and hygiene etc. are discussed in details. Scope of entrepreneurship with piggery was also discussed. Similarly Different aspects of Ornamental Bird rearing: breed, feed, shelter, health and hygiene, marketing etc.were discussed. Fifty two youths from South 24 Parganas joined these training programmes. The programmes were arranged by SSKVK in collaboration with SAMETI.



9. Training for ‘Friends of Coconut Trees’

In West Bengal, The Gangetic plains and coastal districts of West Bengal is found with growing of coconut. The coconut cultivation supports a good portion of livelihood to the farmers. The Coconut Development Board, in collaboration with Sasya Shyamala KVK and SAMETI organized four training programmes, ‘Friends of Coconut Trees’ for the coconut growers of South 24 Parganas during the financial year. Prospect of coconut cultivation, speciality of coconut crop along with its requirement of climate, soil, water, nurture, nutrient and pest-disease management etc. were discussed and demonstrated as far as possible. The most important part of the training was the coconut tree climbing machine. The trainees learnt details of the machine and each one practiced climbing the tall coconut trees. As per the trainees, this machine will give a big thrust to popularize the coconut cultivation and also give more money to the farmers curtailing the cost of hired tree climber. A total of one hundred and thirty two farmers from the coastal blocks participated in these training programmes.



10. Training on Seed Production

Seed is one of the most crucial inputs for better agriculture. Quality of seed, regular supply of the quality seed and to have proper knowledge about the quality regulation of the seeds are the matter of concern. A 6-day training programme on seed production was organised during 11-16 Aug 2014. Thirty eight progressive farmers from all the districts South 24 Pgs., North 24 Pgs., East & West Mid. of West Bengal attended in that programme. During the programme different relevant aspects of seed production like: procedure and gradation of seed; quality of seed etc. were discussed.

“Science without religion is lame, religion without science is blind.”

– Albert Einstein

11. Training on Pearl & Oyster Culture

Demand for pearl is increasing day by day. Keeping this in mind a 3-day training on (24 – 26 Nov, 2014) Pearl & Oyster culture was organised. Different aspects of Pearl & Oyster culture : breed, feed, marketing, preservation, gradation and value addition etc. were discussed in details. Thirty youths from South 24 Parganas joined these training programmes. The programmes was arranged by SSKVK in collaboration with SAMETI.

E. FIELD LEVEL TRAINING AND FARMERS' VISIT

Off campus field programmes of the institutes are often organised on the basis of situation, particularly on the basis of call from the farmers and to address relevant issues of agriculture of a particular area. During the financial year 2014-15, field training programmes were organized in different villages, mainly for the farmers or members of the Farmers' Interest Groups covering major areas like – package of practices of maize, harvesting and processing of maize, alternative to chemical pesticide, study tour of the bio-village famers.

Totally 6 programmes were conducted in different villages on Bankura, South 24 Parganas, Hooghly, Burdwan, KVK, Kallingpong covering 330 farmers.

Date	Title of Training & Venue	Venue	Total
15.04.2014	Package of practices of maize:	Mashiara-Bankura	58
19.04.2014	Harvesting and processing of maize	Mashiara-Bankura	60
06.05.2014	Harvesting and processing of Maize:	Dakshin Shib Ganj-South 24 Pgs.	60
07.05.2014	Harvesting and processing of Maize:	Rakhaskhali, S-24 Pgs.	56
01.10.2014	Alternative to chemical pesticide:	Sukhadanga: Ausgram-I: Burdwan	26
02.10.2014	Alternative to chemical pesticide:	Khanakul, Hooghly	30
		6 Progs.	290

SAMETI also supported to different district ATMa and other states in exposure visit of the farmers. During the year 13 such farmers visit were organised among which 4 such visit were of other states. Detailed of the farmers visit are given in the table below:

Sl. No.	Date	Origin of Farmers	No. of farmers
1.	6.5.2014	Hooghly, Birbhum, Murshidabad	14
2.	21.6.2014	Jajpur (Orissa)	22
3.	19.7.2014	Bankura, Birbhum	32
4.	3.8.2014	Orissa (ISOPOM farmers)	25

“The best way to find yourself is to lose yourself in the service of others.”

– Mahatma Gandhi

Sl. No.	Date	Origin of Farmers	No. of farmers
5.	4.9.2014	Jharkhand (IWMP)	34
6.	8-11 Sept., 2014	Birbhum, Burdwan - Trg. and visit to KVK, Kalingpong	20
7.	15-18 Sept., 2014	Hooghly, South 24 Parganas – Trg. & visit to KVK, Kalingpong	20
8.	27.11.2014	Kultali	83
9.	5-9 December, 14	Orissa (ATMA farmers)	55
10.	28.2.2015	Purulia	30
11.	21.3.2015	North 24 Pgs., South 24 Pgs.	60
12.	20-24 March, 15	Darjeeling	40
13.	27-31 March, 15	Darjeeling	40
13 Programmes			475

F. AGRICULTURAL EXHIBITION & MELA

The Annual Celebration of the Agricultural Training Centre/SAMETI was held during 16-18 January, 2015 in the surrounding area of Agricultural Training Centre of the Ramakrishna Mission Ashrama, Narendrapur. It was 48th Annual Celebration of the Institute.

The Celebration was inaugurated by Swami Bodhaswaranandaji Maharaj, Assistant Secretary of the Ramakrishna Math and Ramakrishna Mission, Belur Math Howrah. The other dignitary during the inaugural programme was Dr. Asadur Rahaman of UNICEF.

The main attraction of the celebration was the exhibition related to agriculture and rural development. This year the main exhibition on agriculture was organized on 'Aerial Agriculture' with the objective to communicate the visitors about the importance of the use of space in agriculture, when cultivable land is decreasing and population is increasing day by day. Main emphasis was shown on how we can use the left out space of our house, roof, garden, boundary walls etc. for production of agri-horticultural crops. The exhibition communicated about the ornamentation of the house, roof etc. with ornamental plants and crops. Selection of crops for different types of space was very attractive and use of the non-biodegradable waste materials for agri-horticultural plants attracted the mass most. More than 15 big posters, 9 big models of house showing efficient use of space in house for crop production, more than 70 live display of plants etc. in suitable pots made the exhibition interesting and communicative to the visitors.

Besides the main exhibition, two other exhibitions on agriculture also attracted the mass. The students of the IRDM Faculty Centre of the Ramakrishna Mission Vivekananda University organized exhibition on progress of bio-technology for agriculture. The students displayed different cultures of bio-fertilisers, bio-pesticides, bio-inputs along with display of the process of preparation and ultimately method of application in the field.

“He alone is the true teacher who is illumined by the light of true knowledge.”

– Sri Ramkrishna

The innovative marketing model 'Farm Gate to Consumers' created lot of interest.

The exhibition of the Sassya Shyamala Krishi Vigyan Kendra displayed different technologies related to agriculture, animal husbandry and fisheries. The aspect of conservation of traditional rice with different important character, ornamental fish culture, new poultry breed rearing attracted the farmers.

Like every year, farmers and also the urban visitors liked most the 'Vegetable and fruit show'. The farmers from different surrounding and also far districts of the state, use to display their agricultural products in this exhibition. This year totally 293 progressive/ innovative farmers participated in the product display out of that 63 farmers displayed 18 different types of fruits and 176 farmers displayed 24 different types of vegetables.

On 18th January, 2015 the whole day was full of agricultural activities. The morning started with the Reunion function of the ex-trainees of the institute. Many Krishi Praukti Sahayaks from different districts and other persons attached to the extension activities at their places participated in that meet. The participants exchanged their views and experience on the current agricultural scenario and need of grass-root level extension in agriculture. The ex-trainees of the institute presented their innovative activities in extension through their volunteer effort. Sri Bhaktikusum Das, Additional Director of Agriculture (General), Govt. of West Bengal guided the session as Chief Guest of the Programme. Sri Sibabrata Ghatak, Joint Director of Agriculture (Plant Protection and Quality Control), Directorate of Agriculture, Govt. of West Bengal addressed the participants as Special Guests. Sri Das narrated the position of the West Bengal in the map of agriculture of India and related the importance of the extension workers in its development. Sri Ghatak appreciated the volunteer work of the alumni of the KPS for the extension of agricultural services. He also encouraged them for further promotion of such work. Sixty two participants from different districts participated the meet.

An important Seminar on the same topic of the exhibition, i.e. 'Aerial Agriculture' was held at the conference hall of the institute. Dr. Pijush Pramanik, Director of Horticulture, Govt. of West Bengal honored the chair of Chief Guest. Besides Dr. Pramanik, the other important speakers of the seminar were Dr. Harshit Majumdar, Assistant Director of Agriculture, Hoogly District, Govt of West Bengal and Sri Anirban Chanda, Director, URBAGRO, Kolkata. More than 100 participants including extension functionaries, University students and scholars related to agriculture, progressive farmers etc. joined the seminar. Dr. Pramanik gave the world wide picture of the aerial and urban agriculture and at present time its need in Indian Agriculture. He also showed some initiatives of the Horticulture Dept. in West Bengal. He emphasized the use of aerial space use and multilayer crop culture for the farmers of the state.

Sri Majumdar, experimented and ultimately is practicing the roof top garden. He narrated his experiences about the benefit of the roof top garden and adding agricultural production and income by using unconventional space. He told the participants that the Roof top garden not only increases the production and income, but also very crucially adding values to the environment of the house. He gave the income expenditure and also the special model of the house suitable for roof-top garden.

The most attractive presentation of the seminar was of the Director of URBAGRO, a private initiative for promotion of Hydroponics. How fish-water and plants in a system (without any soil, fertilizer etc.) benefit

“The brain and muscles must develop simultaneously.
Iron nerves withan intelligent brain – and the whole world is at your feet.”

– Swami Vivekananda

human being, was the main point of discussion of Sri Chanda. Here only the small stone chips or choir pith acts as the strata of the plants. He narrated the possibility of huge production of agriculture on the concrete base of Kolkata. Here the additional advantage is production of fish and totally organic crops.

To encourage the farmers who are contributing to the state agriculture in more sincere way and innovative way are encouraged in this Celebration. The vegetables, fruits etc. agricultural products displayed by the farmers in the agri-horti produce show, are judged by the experts (Agriculture and Horticulture Officers). The quality producers or the farmers who have tried in other ways (say new/unconventional crops, organic practices etc.) are awarded in the prize giving ceremony. Sri Asish Lahiri, Deputy Director of Agriculture (Administration), South 24 Parganas presided over the meeting. Sri Swarup Chowdhury, Assistant Director of Agriculture and also Deputy Project Director, ATMA for the district chaired the guest of honour and both of them awarded farmers with 141 prizes (1st, 2nd, 3rd and special prizes). Both of them encouraged the farmers and advised to accept different advanced technologies available with the dept.

During these three days, technologists, extension functionaries, scientists, scholars, policy makers and students and large number of farmers, covering about 30,000 heads, visited the exhibition and participated in different programmes of the celebration.



“One should desire of God desirelessness. Desire is the obstacle to liberation.”

– Sri Sarada Devi

II SPECIAL ACADEMIC EXTENSION COURSES

A. POST-GRADUATE DIPLOMA IN AGRICULTURAL EXTENSION MANAGEMENT (PGDAEM)

Continuous upgradation of knowledge and skill of the existing functionaries is one of the crucial considerations for development of any organization/ institute/ Govt. system as the days are changing now in very fast speed with respect to technology, information, idea, concept, research findings etc. along with socio-politico- economic situation of a country or state. Development of India is largely dependent on Progress of Agriculture and for that reason agriculture has been given importance since our independence. As agriculture is an ever-changing subject and the change is found to be contrasting in last two decades, a paradigm shift in mode of delivery in extension is essential to cope up with the situation. Naturally, Govt. has taken due step in order to bridge this ever increasing gap in knowledge of the extension functionaries through a well-thought National level course on Post Graduate Diploma in Agricultural Extension Management (PGDAEM) through the National Institute of Extension Management (MANAGE), Hyderabad. It is expected that the diploma would create a professional cadre of farm advisors in the country who eventually would take forward the agenda of agricultural extension.

National Institute of Agricultural Extension Management (MANAGE) has launched the Post Graduate Diploma in Agricultural Extension Management in the academic year 2007-08 especially for the public extension functionaries in distance learning mode. The programme is sponsored by Dept. of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India. In the first phase, the programme would cover extension personnel from the districts where Agricultural Technology Management Agencies (ATMAs) have already been established and functioning effectively.

With the broad objective of creation of professional cadres of farm advisors in the country who eventually would take forward the agenda of agricultural extension in pragmatic and future mode, the SAMETI, Narendrapur has been conducting this one year model course for the technical officers of the state since 2007-08 sessions along with the other states of the country. A thorough orientation, conceptualization and to some extent practice in the sectors of Agricultural extension system, Communication, Economic globalization - agricultural trades, Principles



“The Man who works for others, without any selfish motive, really does good to himself.”

– Sri Ramakrishna

of Management, Participatory planning, Market-led extension, Agricultural business and entrepreneurship development, Project management, Use of ICT, Sustainable development approach in agriculture and allied sectors etc are the main objective of the course. For every module, the participants produces an assignment after going through field/ practical work and towards the end of the course a total project is submitted. Enthusiastic and steadily increasing response has been received from the Govt. employees of the sectors of Agriculture, Horticulture, Fisheries, Animal husbandry, Agricultural marketing, Banking sectors etc.

Specific Course Objectives:

- To enhance the techno-managerial competence of extension functionaries.
- To acquaint the extension functionaries on the latest developments in the field of agricultural extension.
- To equip the extension functionaries with latest tools and techniques for participatory decision making.
- To develop an insight into various extension models to enrich the agri-value chain.

Course Structure and Contents:

The programme has 32 credits and will be offered in two semesters. 1st semester will have 14 credits and 2nd semester will have 18 credits. One credit is equal to 30 hours of study. The programme will have five courses plus five assignments one in each course in the 1st semester and five courses with one assignment in each course plus a project work in the 2nd semester.

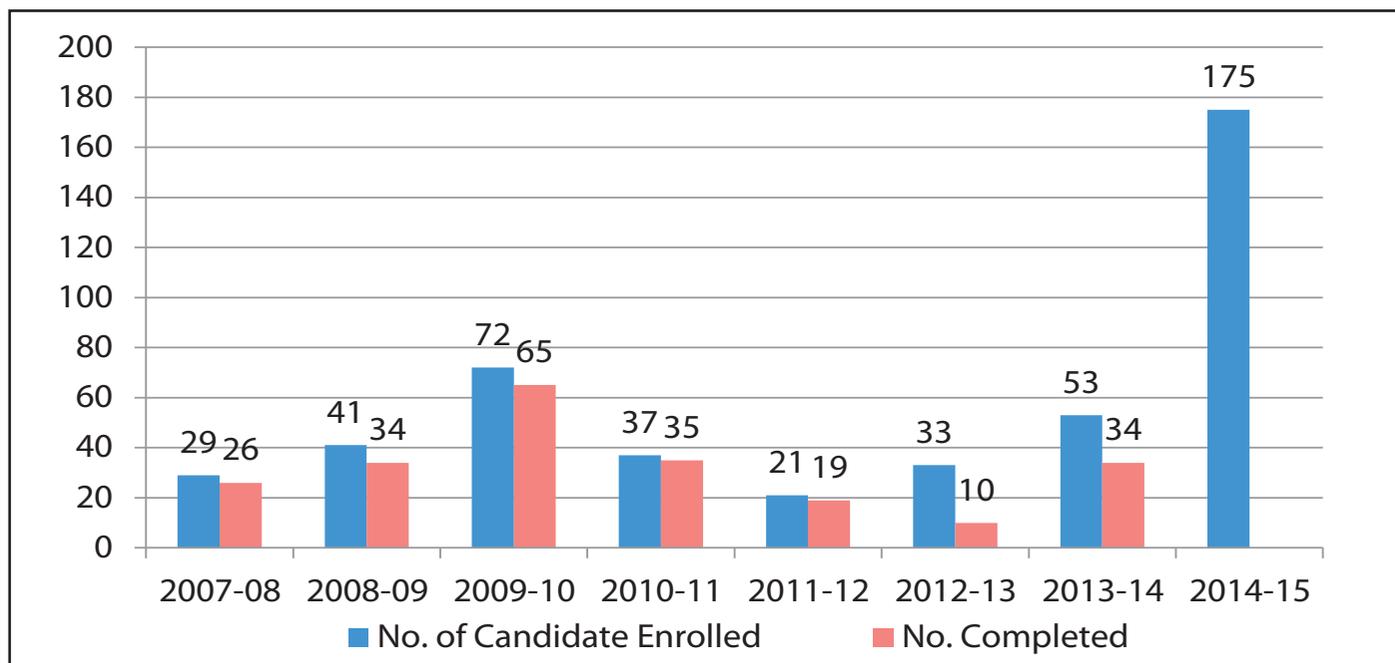
The programme is supported with printed reading material, e-learning resources (Pre-Recorded DVD module) and Lecture series-cum-contact classes. The Lecture series-cum-contact classes are organised at SAMETIs for five days in each semester, well in advance of the commencement of examinations.

STUDY MATERIAL

Semester I			
1	Course 101:	Introduction to Agricultural Extension Management	(4 credits)
2	Course 102:	Communication and Diffusion of Agricultural Innovations	(3 Credits)
3	Course 103:	Principles and Practices of Extension Management	(3 credits)
4	Course 104:	Participatory Approaches in Agricultural Extension	(2 Credits)
5	Course 105:	Research Methods in Agricultural Extension	(2 Credits)
Semester II			
1	Course 201:	Market led Extension	(4 credits)
2	Course 202:	Agri-Business and Entrepreneurship Development	(3 Credits)
3	Course 203:	Project Mangement in Agricultural Extension	(2 credits)
4	Course 204:	Information and Communication Technologies for Agriculture Development	(3 Credits)
5	Course 205:	Sustainable Livelihood in Agriculture	(3 Credits)
6	Course 206:	Project Work	(3 Credits)

“You can’t cross the sea merely by standing and staring at the water.”

– Rabindranath Tagore



The course started in the September, 2007 with 29 enrollment from all the allied departments. After that the enrolment fluctuated but since 2011-12 the stiff rise in enrollment has been noticed. The last year (2014-15 batch) showed maximum enrolment of 175 candidates and that is mainly due to the enrolment of the newly recruited ATMA functionaries in the state. Till the last batch, about 78 percent candidates completed the course. Most of the uncompleted case is due to the engagement of functioneries during the time of examination in consecutive emergency work in the situation like drought, flood, election duty etc.

B. AGRI-CLINIC & AGRI-BUSINESS CENTRE (AC-ABC)

State Agricultural Management & Extension Training Institute (SAMETI), Ramakrishna Mission Ashrama, Narendrapur, Kolkata - 700 103 has been declared as Nodal Training Institute since 2013 for conducting 2-month 'Fully Sponsored Professional Residential' Training Course on 'Agri Clinics & Agri Business Centres (AC & ABC)' under the Agri Clinic & Agri Business Centre Scheme of Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India, in collaboration with National Institute of Agricultural Extension Management (MANAGE), Hyderabad.

The objectives of the scheme are

- Generation of employment through self initiative with agriculturally educated rural youths
- Support to public extension system through the trained agri-preneurs to cater local needs
- To support agricultural development

The Agriculturally educated youths will be trained for 2-months and after completion of the training they will go for establishment of the Agri-Business Centres with good scope of bank loan in subsidy mode.

“Finish the few duties you have at hand, and then you will have peace.”

– Sri Ramakrishna

Agri-Clinics are envisaged to provide expert advice and services to farmers on various technologies including soil health, cropping practices, plant protection, crop insurance, post harvest technology and clinical services for animals, feed and fodder management, prices of various crops in the market etc. which would enhance productivity of crops/animals and ensure increased income to farmers.

Agri-Business Centres: Agri-Business Centres are commercial units of agri-ventures established by trained agriculture professionals. Such ventures may include maintenance and custom hiring of farm equipment, sale of inputs and other services in agriculture and allied areas, including post harvest management and market linkages for income generation and entrepreneurship development.



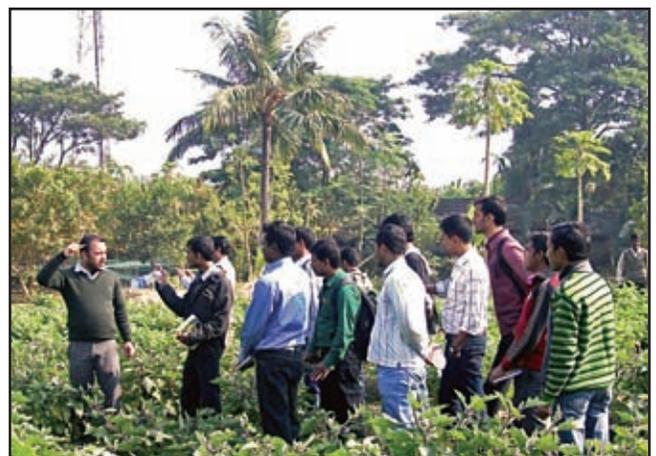
Supporting the Trainees During Training and Follow Up

Two months training programme with free of cost aims at transforming persons qualified in the field of agriculture and allied sectors into agri-entrepreneurs. It is an intensive capacity building effort mainly divided into two categories of activities:

- (i) Exposing the trainees into potential agri-ventures in their area and providing additional subject matter training to refresh their knowledge and skills. Besides motivation, training will also concentrate on building communication skills, record maintenance, schemes/programmes from where financial assistance is available etc. The basic idea is to customize the trainings modules based individual and collective needs of the entire group.
- (ii) Facilitate the trainees to choose a venture and to prepare DPR based on market survey, hands on experience with the support of experienced bankers.

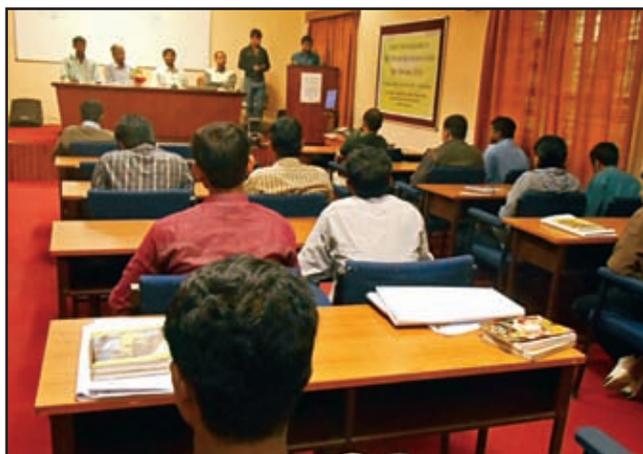
Detailed interactions should be arranged with stakeholders such as farmers, bankers, department officials, input dealers, NGOs working in the area.

Identification and analysis of farmers' problems and



“All the wealth of the world cannot help one little Indian village if the people are not taught to help themselves”

– Swami Vivekananda



provision solutions through extension and business advisories are focused upon. Assessing technical feasibility and financial viability of ventures, hands-on interface with the successful entrepreneurs and DPR preparation with assistance by experienced bankers as resource persons are the other crucial parts of this activity.

Linkage with Credit Assistance under the scheme would be purely credit linked and subject to sanction of the project by banks based on economic, viability and commercial considerations. The eligible financial institutions under the scheme are different nationalize Banks refinanced from NABARD.

Project Cost/ Loan Ceiling

After successful completion of the 2-month residential training, the trained person will get the opportunity to have bank loan with Special NABARD Subsidy (36-44%) of project cost (up to Rs. 20 lakh individually and Rs. 1 crore in group) for doing business with a close follow up and monitoring.

Candidates trained under this Scheme can avail subsidy from any Scheme of Central or State Government related to his/her field of agri-business, if it is Beneficial to the candidate. However, subsidy for the same project cannot be availed from more than one Scheme by a candidate.



Status of Training:

Sl. No.	Date of Course	No. of Participants	No. of estab. Unit	Pattern of Investment (No. of candidates)		Bank Loan obtained (Lakh)
				With Bank Loan	Self Finance	
1	30 th January to 30 th March, 2013	28	19	4	15	42.00
2	5 th August to 3 rd October, 2013	35	26	3	23	14.00
3	9 th December, 2013 to 6 th February, 2014	29	22	3	18	16.00
4	15 th Oct. to 13 th December, 2014	35	28	4	24	34.00
5	8 th Dec., 2014 to 5 th Feb., 2015	27	20	2	18	13.00
TOTAL		154	115	16	99	119.00

Men are more valuable than all the wealth of the world

– *Anonymous*

Types of Agri-Business Established

So far the agri-ventures are established along with advisory in the area of Dairy, Poultry, Goatery Piggery & Agri-clinic, Fishery, Integrated Farming, Custom Hiring, Purchasing & selling of Agril. Input & Output (Stock business), Fertilizer, Pesticide & Seed Shop and Nursery.

C. ‘DIPLOMA IN AGRICULTURAL EXTENSION SERVICE FOR THE INPUT DEALERS (DAESI)’

One-year duration Diploma course for the agri-input dealers has been started at SAMETI since 24th August, 2013. The course is guided by the ‘National Institute for Agricultural Extension Management (MANAGE)’, Hyderabad with the approval of Govt. of India.

Objective and Goal

The course is to equip the dealers who are engaged in agricultural input supply along with advisory to the farmers, with the knowledge on basic agriculture targeting improved agricultural extension services and their better business and ultimately leading to agricultural growth.



“Be the change that you wish to see in the world.”

– Mahatma Gandhi

Background

- There is a large network of about 2.82 lakh Agri-Input Dealers in the country
- It has been noticed for many years that farmers have a very close relation and access to the dealers regularly and they use to receive different suggestions/recommendations on agricultural activities as the input dealers are very much accessible to them.
- Most of the input dealers have hardly any agricultural education and many a times unintentionally percolates in-effective recommendation, which not only increases cost of cultivation but also causes inefficient management of agricultural problems along with pollution to the environment.



Bridging the Gap

- To bridge the gap and also by feeling the urgency of formal education of agri-input selling persons, Govt. of India through National Institutes of Agricultural Extension Management (MANAGE), Hyderabad, initiated the course 'Diploma in Agricultural Extension Service for the Input-dealers (DAESI)', in the country.



Action

- For the state of West Bengal, SAMETI of the state took initiatives to conduct the course for the input dealers of West Bengal and the SAMETI, Ramakrishna Mission Ashrama, Narendrapur, Kolkata - 700 103 has been declared by MANAGE, Hyderabad as the Nodal Training Institute for the State.
- On Pilot basis, SAMETI to conducted the course for 80 Input Dealers (40+ 40) in two Centres:
 - SAMETI, Ramakrishna Mission Ashrama, Narendrapur, Kolkata - 700 103
 - Ramkrishna Ashrama Krishi Vigyan Kendra, Nimpith, South 24 Parganas - 743 338

Out of the total course fee, Input dealers contributed Rs.6,000/- individually and the rest by the Dept. of Agriculture, Govt. of West Bengal. SAMETI contributed



“Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.”

—1st Earl of Chatham, William Pitt

in organizing orientation programme, mid-term workshop, final review/feedback workshop etc. EICA encouraged the dealers by gifting T-shirts and cap for joining the course.

Mode of Teaching/Learning:

- Class on a day of every week, generally Thursday (as convenient of the dealers) for 52 weeks
 - o Each class day generally contains: Practical hours (morning/before lunch session) and Theory (after lunch session)
 - o Cover all the possible crop being in the field with observation of crop growth, pest incidence at a week interval
 - o Visits to different laboratories related to studies
 - o Visit of Institutions/organisation related to studies
 - o Visit of success stories/model farms
 - o Collection of specimen (insect, disease, weed etc.), preservation and study
 - o Continuous data generation on market price of agril commodity etc.
 - o Record of Farmers problems related to plant protection etc. at their shop and verification of recommendations etc. in the class on regular basis.



Programmes of 52 weeks

	Inauguration /Course Module Discussion
1	Integrated Pest Management/Pest situation in rice field/ Insecticides Act, Rules, Quarantine Laws
2	Pest situation in rice field/Methods of pest surveillance and pest scouting and concept of ETL / Crop production technology - Rice
3	Identification of Major Disease of Rice/Pesticide residue problems and methods to overcome it.
4	Pest identification of the existing crops /Essential commodities act & fertilizer control order
5	Exposure visit on RKMKV, Nimpith: Soil testing lab, Different agricultural technology model etc.
6	SRI (System of Rice Cultivation Practice) - Practical/(Seed bed preparation & seed sowing)/ Importance disease of field crops
7	Role of plant nutrients (Macro/micro) and their deficiency symptoms/Organic Farming for soil health management/Role of bio-fertilizers and plant growth regulators in agriculture and horticulture

“Agriculture is the noblest of all alchemy; for it turns earth, and even manure, into gold, conferring upon its cultivator the additional reward of health.”

– Paul Chatfield

8	Crop production technology – cucurbitaceous vegetables/Crop production technology – brinjal, tomato, potato, tuber crops (sweet potato, yam, elephant foot, colocacios)
9	Seed act, seed rules, seed control order/Practice on Seed Production
10	New molecules and existing molecules of fungicide, Bacteriacide etc./Insect pests of vegetables and fruits
11	Kisan credit card and crop insurance/Insect pests management of Winter Vegetable crop
12	Crop production technology – Groundnut Disease and pest management – Maize, Mustard, Groundnut and Sesamum crop
13	Visit to Vermicompost production unit of RKM, Narendrapur Pest and disease identification on winter crop and management practice
14	Identification and management of Insect in winter vegetables Chemical control of disease on vegetable crop
15	Land use planning in the state and broad soil types. Concept of Integrated Nutrient Management and its importance in Agriculture and Horticulture
16	Gender Mainstreaming in terms of selection of prospective buyers. Practical - Vermicompost preparation
17	Crop production technology – Brinjal, Cabbage, Cauliflower, Chili & Tomato ICM - Integrated Crop Management on Winter vegetable crop.
18	IPM- of vegetables and fruits/IPM- Botanicals and bio-pesticides and bio-rationales and their role in pest management
19	Production technologies for mushroom and spawn Practical - Production technologies for mushroom and spawn
20	Organizing Exhibition on Fruits, Flower and vegetable show Farmers Interaction, success story study
21	Field practical - Identification of disease and their incidence on winter vegetable crops and their management: Cucumber, Cabbage, Cauliflower, Broccoli, Tomato, Potato, Onion and Boro paddy Diseases & Pest management on Mango and Banana
22	Package of practice of Mango/ Package of practice of Banana Package of practice of tissue cultured Banana –G-9 & others
23	Integrated Watershed Management/ Interaction with different Pesticide Industry people: New molecules, Pesticide application and pesticide safety measure
24	Crop situation study in Agricultural Farm/Seminar on ‘Agriculture for Prosperity’
25	Basics of soil science and Integrated Nutrient Management on Agricultural and Horticultural crop Motivation and communication skill
26	Basic Knowledge of Plant growth hormone and their application on Agriculture and horticultural crops. Half yearly Examination/ assessment

“Anyone who has never made a mistake has never tried anything new.”

– *Albert Einstein*

27	Importance of weed management of different crops. Weed Management – season-wise major weeds in the major crops & its management Package and practice of black gram (kali) and moong cultivation
28	Extension Management/Group Exercise
29	Orientation about the agro-ecological situation of the state and participants own district Integrated Farming System: crop planning in rainfed and irrigated areas.
30	Market led extension – Meaning, Role of input dealers to transform farmers into agripreneurs to establish forward and backward linkage/Practical – Soil Test
31	Operation of Computer: Word/Operation of Computer : Excel/Power point
32	Use of internet practice/Practical on Use of internet/Use of Internet for agriculture
33	Extension reform Concept, Organizational Mechanism and role of input dealers the different organizational structure Farm mechanism-Scope and importance, Name and utility of various farm implements and machinery
34	Chemical pesticide residual analysis and First Aid Package of practices of Medicinal and aromatic plants cultivation
35	Visit to the Seed production farm/Problem soil of the state and their management
36	Common Fish Cultivations in South 24 Parganas-District Cyber extension – Concept, various agricultural information sources, How to access and disseminate the agricultural related information to the farmers: Practice
37	Cultivatin on Dalia, Chandramallica, Rose, Marigold along seasonal flower plants Practical – grafting on (Floriculture) Dalia, Chandramallica, Rose, Marigold along seasonal flower plant plants
38	Identification of diseases and pest symptom and preventive measures of Papaya banana, Sapota, coconut, Guava, and litchi / Difference between Nutrition deficiency and disease Symptoms



“Let New India a rise – out of the peasants’ cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

– Swami Vivekananda

39	Practical - Practice on grafting on fruit plants How to access and disseminate the agricultural related information to the farmers from Internet access
40	Effect of weather variation in agricultural operation and Agronment Advisory service for the state Integrated watershed management in sundarban areas, South 24 parganas
41	Weather parameters & its impact on Agricultural Production Different vegetables cultivation under Rainy season in West Bengal
42	Visit to the Central Integrated Pest Management Centre, Salt Lake: Laboratories of Biological Control Session on Effective Pest Management
43	Coconut cultivation: Plantation, nutrition, pest management Use of Coconut plant Climber impenet: Demonstration and Practice
44	Medicinal Plant farm visit: Identification of different Medicinalplants ans information about their cultivation and uses/Coconut cultivation/Coconut pest control
45	Exposure visit - Beetle vine cultivation arm, Kakdwip, South 24 Parganas
46	On line Pesticide renewal through Internet process/Fertilizers licenses renewal through Internet process
47	Beetle vine cultivation/Disease control on beetle vine/Insect Pest pest control on beetle vine
48	Field Study/Identification of disease & pest in existing kharif crops
49	Identification of disease & pest in existing kharif crop
50	Farmers field exposure visit to Contai, Medinipur/ DIGHA- Shrimp Culture
51	Tissue culture Laboratory visit- Vivekananda University/Crop planning in rain fed area
52	Term End (Final) Examination



“Do not afraid; the Master is behind you, and I am, too, as your Mother”

– Sarada Devi

III AGRICULTURAL EXTENSION SERVICE

A. ANIMAL RESOURCE DEVELOPMENT – TRAINING & DEMONSTRATION

The Animal Husbandry (AH) Unit is one of the important units of ATC/SAMETI for its Training-Demonstration Extension Services. Throughout the year this unit conducts different skill development as well as managerial/extension courses with the direct support of demonstration.

Training Issues

The important courses dealt by this unit are related to Dairy development, Poultry development, Green fodder development, Health and Hygiene of the animal, General and Scientific maintenance of Animal Farm; Breeding development, specially Artificial insemination; Entrepreneurship development through animal husbandry and Animal Farm management.

Units Under Animal Husbandry

The above courses are directly supported by the well maintained units like – Dairy Farm, Poultry Farm, Green Fodder Land, Bio-gas Plant, Vermicompost Unit etc.

Dairy Unit

The existing dairy unit is an asset for pertaining quality training. This unit includes pure breed of Gir as well as several cross breeds of well maintained Pe-digree. The cross breeds includes Holstein-Frizian (HF) x Gir; HF x Sahiwal (S) Jersey x Gir and Jersey x Sahiwal. The dairy stock at a glance is given below:



TABLE-I

Sl. No.	Cattle	No.
01.	Milch Cow	58
02.	Dry Pregnant cow	10
03.	Training Cow	05
04.	Pregnant Heifer	05
05.	Heifer above 18 M	8
06.	Heifer above 12 M	8
07.	Heifer above 6 M	10
08.	Heifer below 6 M	5
09.	Male Calf below 10 M	11
	Total	120



“As long as I live, so long do I learn.”
 – Sri Ramakrishna

The bio-security and scientific disease control are the two main factors for this well maintained dairy. The Bio-security and Disease control becomes standard for the dairy for West Bengal.

TABLE-II (Bio-security)

Sl. No.	Test	Frequency per year
01.	Milch test for Mastitis	4 times
02.	Blood test for Brucellosis	Once
03.	Blood test for IBR	Once
04.	Blood test for Protozoa	Once
05.	Tuberculin test for Tuberculosis	Once
06.	Stool Examination for Endo-Parasites	Thrice
07.	Disinfectant Spray in Cattle Sheds	Once in a week
08.	Use of Bio-waste materials in	3 Bio-gas plants



TABLE-III (Disease Control)

Sl. No.	Preventive measures	Frequency per year
01.	Vaccination against B.Q., H.S, Anthrax	Once
02.	Vaccination against F.M.D.	Twice
03.	Vaccination against Theileria	Once
04.	Blood test for Diagnosis of diseases	Once
05.	Routine De-worming	4 times



The average daily milk production of the unit is 525 kg. with average 4.8 percent fat and average 8.75 percent SNF (Solid Net Fat), becomes a subject to the dairy management students and entrepreneurs.

The University students from WBUAFS and also IRDM Faculty Centre use to come to the unit regular basis to learn the dairy technologies and management. The production serves the student of the Ashrama. A major share goes to the dairy workers also the children, aged persons and ailing persons of the surrounding communities.

Poultry Unit

A folk of 300 birds are maintained in 'All out system' mainly coinciding with training courses. Generally 'White Leg Horn' is reared as broiler to demonstrate scientific poultry rearing targeting entrepreneurship

"I tell you one thing - if you want peace of mind, don not fault with others."

– Sarada Devi

development by the rural youth and women SHGs.

Green Fodder Cultivation

The AH unit emphasizes to feed its animal mainly on Green Fodder. The unit fully utilizes its land through continuous cultivation of Hybrid Napier, Para Grass and on seasonal basis on Maize, Cowpea, Berseam, Oats etc. The visiting farmers and the trainees directly learn about cultivation of green fodder and its importance.

Other Units

The Gobargas (Biogas) Plant and Vermicompost is an attached unit and an integrated part of the A.H. Farm Management. The dairy workers use the gobargas as light and fuel throughout the year, while the vermicompost goes to the Ashrama Farm, vegetable garden of the workers of AH units and also to the farmers of the surrounding areas. Both the units act as demonstration and training component of the learning trainees.

Extension Work

Throughout the year the AH Unit serves the farmers of the surrounding villages as well as the farmers of far districts.

The thrust areas of extension and the actual performance during the reporting period is shown below:

Thrust Areas

Improvement of the local cattle breed through cross-breeding.

Practical oriented training to the youth for self-employment.

Establishment of small, medium and large sized livestock farms.

Additional income generation for rural women through rearing of Cow, Goat, Poultry and Ducks in Low-cost technology.

Distribution of green fodder seeds/cutting.

TABLE-IV-A (Extension Performance)

1.	Distribution of fodder cuttings to the farmers	9000 nos.
2.	Fowl Pox	6000 nos.
3.	Numbers of animals treated	2850 nos.
4.	F1RD vaccination	18000 nos.
5.	FDRD vaccination	6800 nos.
6.	FMD vaccination	600 nos.
7.	BQ vaccination	400 nos.
8.	HS vaccination	650 nos.
9.	Door to door A.I. (Including field A.I. workers)	2615 nos.



“Let New India a rise-out of the peasants’ cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

– Swami Vivekananda

B: SOIL TESTING LABORATORY

Sustainability of agricultural production largely depends on the sustainability of soil health and fertility to a great extent. Soil testing is the base for management decisions about fertilizer requirements. Naturally use of fertilizers, manures, soil amendments, micronutrients must be based on the need of the respective soil; otherwise cost of cultivation along with degradation of soil health will increase rapidly.

Fertilizers such as NPK, lime or gypsum are recommended to improve soil fertility. Fertilizer application, which is based on soil testing, usually leads to an increase in yields and profits by providing the correct amounts of needed nutrients. It also leads to balance application of nutrients in a field. As nutrient availability becomes less variable, the crop growth is more uniform. Regular soil testing also contributes to environmental sustainability as the use of excess fertilizers can be avoided. It provides an opportunity to the farmer to have a clear idea about the fertility level of the tested land and the status of plant nutrient elements.

The institute has a modern soil testing laboratory, providing service to the farming community to know their soil quality. Testing of soil covers - pH of soil, electrical conductivity, organic carbon, available phosphorus and potassium. During last one year 431 soil samples have been tested.

The institute took an initiative to establish small soil testing laboratories at village level with the support from Dept. of Horticultural, Govt. of West Bengal. The village organization (registered under society act) closely associated with rural development activities of Ramakrishna Mission were selected for such venture.

The objectives are –

- To create awareness about soil health and importance of soil testing among the farmers
- To create minimum infrastructure at village level for soil testing at the doorstep of the farmers.
- To provide speedy feedback and recommendation to the farmers.

The Major Instruments provided to the field laboratories are

- i) PH meter
- ii) EC meter
- iii) Colorimeter
- iv) Flame photo meter
- v) Shaker
- vi) Electronic Balance
- viii) Distilled water plant.



“I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy.”

– *Rabindranath Tagore*

Type of Analysis done

- i) Routine Analysis Done (pH, EC, Organic Carbon %, Available P kg/H, Available K kg/H, lime requirement, gypsum requirement)

Process of collection of soil Sample

Sample collection through Rural development infrastructure, club, S.H.G., individuals etc.

No. of laboratories Situated – 5 nos.

Burdwan Deepan Yuba Ghosthi; Block Khandakosh
 Sahid Khudiram Srmiti Sangha, Keshpurs, Midnapore (W),
 Kansabati Guchha Samity, Midnapore (W) Block – Panskura
 Sagar Mongal – 24 pgs (S), Block – Sagar
 Patharpratima – 24 pgs (S), Block – Pathar Pratima

How are responses from the location?

Initially the responses of the Farmers were very low because of the gap of communication.

Later on with Awareness camp in the area and also getting feedback from benefitted farmers, the number of sample is increasing gradually. In last 6 month of the reporting period the following number of samples were tested and recommendation given.

Burdwan Deepan Yuba Ghosthi; Block Khandakosh - 150
 Sahid Khudiram Srmiti Sangha, Keshpurs, Midnapore (W), - 200
 Kansabati Guchha Samity, Midnapore (W) Block – Panskura - 170
 Sagar Mongal – 24 pgs (S), Block – Sagar 30
 Patharpratima – 24 pgs(S) Block – Pathar Pratima – 300

In 2014-15, 1281 numbers of soil samples have been tested by all the soil testing laboratories.

C. CUSTOM SERVICE UNIT

The workshop wing / custom service unit is an important wing if the institute. It is run by the technical guidance of several qualified personnel and experienced manpower. The basic objective of the unit is

- i) To help the farmers by providing technical expertise & extension service on agricultural implements & technology.
- ii) To provide various custom hiring services to farmers s.t. they can avail reasonable rate.
- iii) To promote agricultural mechanization in urban areas also in addition to rural area.

“Science without religion is lame, religion without science is blind.”

– Albert Einstein

The unit is well equipped with several manual and power operate modern agriculture implements such as tractor (3), power tiller (2), trolley (1), cultivation (1), reaper (1), pump set (many), mist blower (1), engine operated & prayer (1), battery operated sprayer (1), manual transplanter (1), drum seeder (1), seed treatment drum (1), tools (adequate), cono weeder (1) petrol engine (1), twin wheel hoe (2), seed drill (1), mould board plough (1), twin wheel hoe(2), seed drill (1), mould board plough (1), dry land weeder (1), sweep cultivator (1), seed cum fertilizer drill (1), seed grader (1) etc.

The unit activity engaged with different types of services e.g. imparting training to farmers, farmers sons, rural youth, officers & extension functionaries of different categories, tillage tractor drawn implements, tillage & puddling by power tiller both in campus & off campus, providing trolley towards transport for farmers. The unit is also engaged with organizing demonstrations, Krishi mela, maintenance repair and improvisation of agricultural implements.

During the previous financial year (2014 Apr. -2015 March) the wing has provided the following services to the farming community of the Narendrapur and adjacent area.

Sl. No.	Services	Hours
1.	Ploughing with power tiller	267 hr 50 min
2.	Ploughing with tractor	139hr 10 min
3.	Transport with tractor trolley	42hr 45 min



D. AGRICULTURAL FARM - TRIAL & DEMONSTRATION

The agricultural farms are very supportive to different Human Resource Development Activities of the Institute. It acts as an integral part of the SAMETI/ ATC in its effective training, demonstration, trial and source of quality seeds for the farmers. Farm planning, management of agricultural farm etc. are also other important lessons to many entrepreneurs/ agri-business minded persons.

During the reporting period, the farm was very effectively used for training for field-based technology dissemination, like - system of rice intensification, drumseeder rice culture, direct dry seeded rice culture, scientific cultivation of different pulses, oilseeds,



“The best way to find yourself is to lose yourself in the service of others.”

– Mahatma Gandhi



vegetables, operation of power reaper, transplanter, conoweeder etc.

In the last year, the farm scientifically grew different varieties of rice on 32 acres, mustard (2 varieties) on 5 acres, pulses (Black gram, Green gram and red gram) on one acre, maize on 0.75 acre, vegetables (31 different types) on 7 acres, flowers of more than 15 different types on one acre and fruit like papaya, banana etc. on one acre.

Most of the cultivated plots also were acted as demonstration plot, specially to maintain for SRI, drumseeder, exotic vegetables (Broccoli, selary, zucchini,

Brussels sprout, red cabbage, cherry tomato, leek etc. In collaboration with horticulture department, special demonstration was done on onion cultivation on variety ‘Agri-found light Red’ and Sukh sagar in one acre. On about 2 acres, demonstration is going on ‘organic farming’ in collaboration with School of Agriculture and Rural Development of Vivekananda University. More than 700 farmers from different district of West Bengal and other states visited those demonstrations.

Trial had been conducted on maintenance of Germ plasm of traditional rice varieties like Gobindobhog, Badshabhog, Lilabati, Kalonunia and other 12 more varieties. Another trial was done on effect of different types of mulch on high value vegetables like broccoli etc. Effect of nutrient management, specially spraying of potassium and micronutrient on green gram was also done. All the trial/experiments were done in collaboration with the School of Agriculture and rural development of Vivekananda University.

Quality seed production was conducted in collaboration with the West Bengal State Seed Certification Agency, Dept. of Agriculture on Rice Verities, like- MTU-7029, IET-5656, Swarna sub-1, NC-492, IET-4786, Basmati F-6 and Mustard variety: Bhagirathi and B-9.



“He alone is the true teacher who is illumined by the light of true knowledge.”

– Sri Ramkrishna

IV STUDY & EVALUATION

Appraisal of ACABC Programme

Being the developing country, India has been suffering from acute unemployment problem. The intensity of this crisis is much more in rural areas since nearly 69 percent of the total population in our country still live in villages. On the contrary, there remains an enormous prospect for self employment where a bulk of the rural unemployed people can be involved and will be able to earn their livelihood.

Keeping in view of above prospect, Department of Agriculture and Cooperative, Ministry of Agriculture, Government of India has entrusted National Institute of Agricultural Extension Management (MANAGE) to initiate Agriclincs and Agribusiness Centre (ACABC) Scheme. So, MANAGE has identified Nodal Training Institutes (NTI) in the states of the country and each of these state level NTIs imparts two months training programme for the potential agripreneurs. Training module has been developed by MANAGE and MANAGE keeps continuous contact with NTIs during entire tenure of the training programme being organized at the NTI level i.e. right from selection of trainees to post training follow-up phase. This ACABC scheme covers entire financial support for training and handholding provision of loan and credit linked back ended composite subsidy.

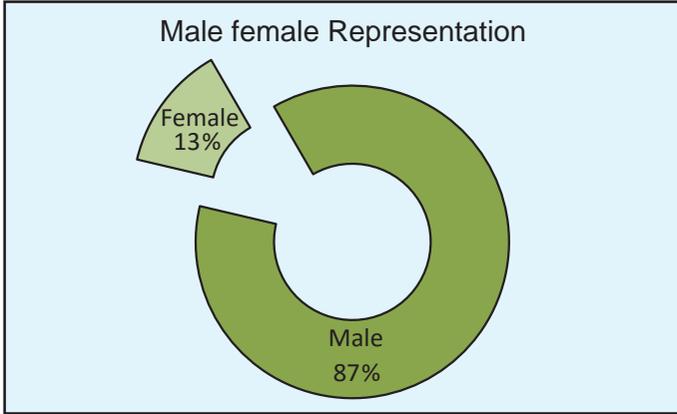
As per revised Agriclincs and Agribusiness Centres (ACABC) Scheme 2010, Department of Agriculture & Cooperation, Ministry of Agriculture, Government the objectives of ACABC have been defined as :-

- To supplement efforts of public extension by necessarily providing extension & other services to the farmers on payment basis or free of cost as per business model of agripreneur local needs and affordability of target group of farmers.
- To support agricultural development &
- To create gainful self-employment opportunities to unemployed agricultural graduates agricultural diploma holders intermediate in agriculture & biological science graduates with PG in agri-related course.

SAMETI, Ramakrishna Mission Ashrama, Narendrapur, Kolkata has been nominated as NTI in the state of West Bengal. It conducted four ACABC Training Programmes at its premises so far. This NTI has organized 5 AC ABC training programmes from January, 2013 to February, 2015. Altogether 154 agripreneurs have attended the two-month programme. As regards male female ratio, a handful number of female participants i.e. only 12.98 per cent was observed compared to their male counterparts. In the realm of representation from different castes, it has been reported that Scheduled Tribe (ST) candidates are extremely poor in number, nearly 1/5th of the total participants from each of the Scheduled Caste (SC) and other Backwards Classes completed the programme and around 3/5th of the total participants belong to General Caste category. Detailed statistical figures with regard to above observation are shown in the following two graphs.

“The brain and muscles must develop simultaneously.
Iron nerves withan intelligent brain – and the whole world is at your feet.”

– Swami Vivekananda



Graph 1 : Total No. of Participants attended AC ABC Training Programmes



Graph 2 : Caste wise distribution of total participants

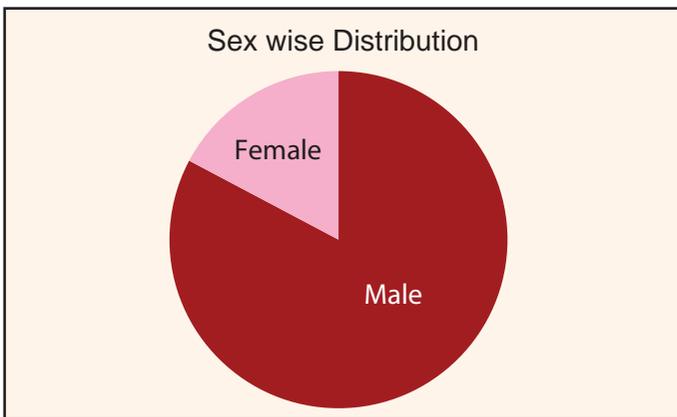
It may be referred here that on completion of the courses all the ex-trainees make frequent contact especially for their project related issues and also for the clarification of critical issues faced by them while addressing the farmers’ problems.

To get a comprehensive feed-back from trained agripreneurs, they were invited at SAMETI. On this occasion they were thoroughly briefed about the Institute’s initiative to document their views and experiences and finally, the trained agripreneurs were given a structured questionnaire with a view to making an in-depth understanding of their existing condition, problems and their expectations too from SAMETI to resolve those problems.

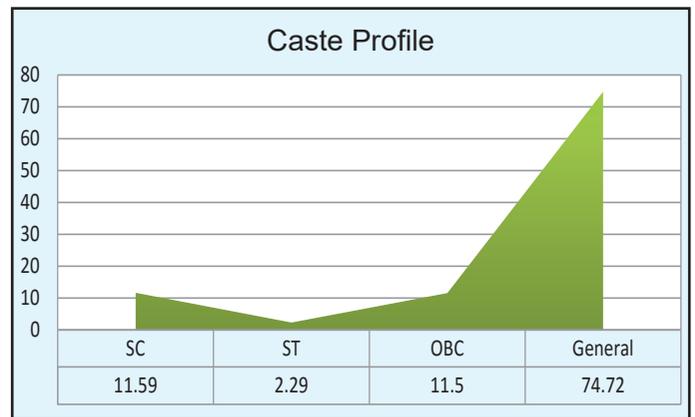
Study Findings

I. Trainees’ Profile

Among the trained entrepreneurs probed for this impact study majority of them were males, to be precise 82.76 percent was male and the rest 17.24 percent constituted female entrepreneurs.



Graph 3



Graph 4

A bulk of agripreneurs was felt to be energetic as 75.86 were below 30 years of age. As regards caste

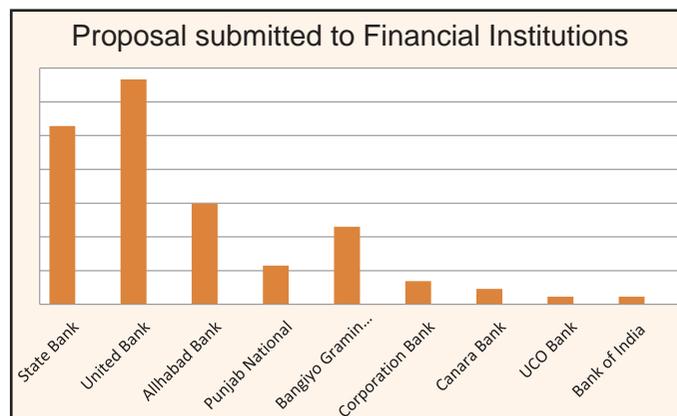
“One should desire of God desirelessness. Desire is the obstacle to liberation.”

– Sri Sarada Devi

composition, a little over 25 percent agripreneurs was found to represent scheduled caste scheduled tribe and other backward Classes categories. From the religion point of view, only 11.50 percent trainees were observed to represent Muslim Community while the rest persons hailed from Hindu religion.

II. Entrepreneurs' Preferred Financial Institutions

Apart from commercial banks other financial institutions were also earmarked by Govt. of India for financing the schemes being submitted by the trained entrepreneurs. Findings revealed from the respondent-agripreneurs that only 11.50 percent submitted their proposal to Gramin Bank and the remaining trainees approached Nationalised Commercial Bank. Among these Banks, United Bank of India was chosen by 33.35 percent entrepreneurs, 26.43 percent opted for State Bank of India, Allahabad Bank was convenient to 19.94 percent while the rest 13.74 percent entrepreneurs applied for their loan to 5 different commercial banks.



Graph 5

III. Agripreneurs' opted Enterprises

Preference of the enterprises reveals the prospect of ventures perceived by the agripreneurs for being profitable.

In this study 17 different enterprises were identified being preferred by the trained entrepreneurs on which proposals were submitted to the financial institutions. Out of these enterprises, Agricultural Input was found to be highly lucrative to 22.98 percent trainees, Fishery stood second as 13.79 opted for that enterprise and the Poultry was preferable to 11.48 percent respondents. Next to these three major dominant enterprises, Nursery, Custom hiring, Tractor, Goatery were seemed to be profitable to 9.19, 8.04, 6.89 and again 6.89 percent trainees successively. Dairy Farm appeared to be feasible venture to 4.59 percent ex-trainees and stock business to 3.44 cent, 2.29 per cent agripreneurs thought for Vermi Composting, Mushroom and Piggery production equally. The remaining respondent trainees i.e. 2.28 percent respondents can be equally divided into Fruit Garden and Agricultural Machinery Repairing i.e. each of these two enterprises encompassed 1.14 per cent ex-trainees.

IV. Loan Amount

Risk taking capabilities of entrepreneurs can be assessed from the amount of loan sought by them. Loan amount sought by agripreneurs from Bank ranged from Rs.1 lac to 10 lac and above. A little over 1/4th of the total number of trainees submitted proposal for loan amount of Rs.10 lac and above and a bulk quantum of trained agripreneurs i.e. 45.96 percent approached



Graph 6

“The Man who works for others, without any selfish motive, really does good to himself.”

– Sri Ramakrishna

Banks for Rs.4.5 lac. 12.63 percent restricted themselves within Rs.3 lac nearly 1/10th of the total trainees sought loan amounting to Rs. 6 to 7 lac and the rest number of respondents trainees i.e. 6.88 percent trainees sought Rs.6 lac for their business endeavours.

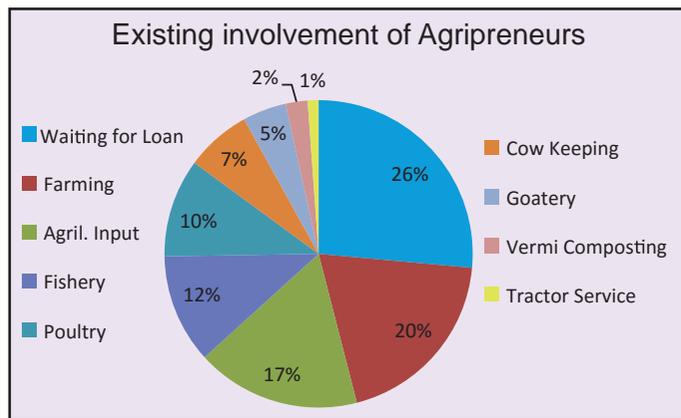
V. Existing Status of Loan

Only 4 agripreneurs have received loan so far. Of them, one took Rs.19.6 lac for Agriculture Input Selling-cum-Agro Service Centre, another person involved in Fish Breeding got loan of Rs.12 lac, third one received Rs.4.5 lac for Poultry-cum-Meat Processing Centre and the fourth agripreneur running custom hiring unit availed of Rs. 3.25 lac from Bank.

Other trained agripreneurs have been negotiating with Bank for receiving the loan amount. It is indeed a matter of disgrace that Bank Officials feel hesitated to disburse loans to the trained agripreneurs. Applicants are being pressurised by Bank to provide collateral securities. SAMETI took efforts to persuade the concerned Branches as well as their Head Offices. Almost all the trainees have already initiated their enterprises with their family support and they are eagerly waiting for sanction of their project proposal lying with the Banks.

VI. Present involvement of trained agripreneurs

Trained agripreneurs appeared to be highly enthusiastic as they already have started their enterprises instead of waiting for receiving loan amount from Bank. Instead of being disheartened 73.57 percent ex-trainees have already involved in different enterprises with their own financial resources as well as financial support of their families. Altogether 8 different enterprises have been observed where the enthusiastic entrepreneurs have initiated their ventures. Among these enterprises, Farming covered 19.54 per cent 17.24 percent ex-trainees



Graph 7

initiated their venture in agricultural inputs, 10.34 percent started Poultry, Fishery accommodated 11.48 percent and the rest trainees have been running Cow Keeping, Goatery and Vermi Composting. Only 1.14 percent has been found to provide Tractor Service and 26.43 percent ex-trainees have been eagerly waiting yet for disbursement of Bank loan.

Trained agripreneurs were probed of their own resources and family support in terms of initiation of their enterprise. It has been revealed from their responses that 36.78 percent agripreneurs are in no way dependent on their families and on the contrary, same quantum of ex-trainees got family support.

VII. Capital Investment

It is a proven fact that real agripreneurs always thrive for initiating their enterprise without wasting time. So, information was sought from the respondents regarding their amount of investment in their initiatives. It was reported that 22.98 percent entrepreneurs have invested up to Rs.50,000, amount ranging from Rs.50,001/- to 1 lac by 10.34 percent and next to this group of agripreneurs is 6.9 percent ex-trainees who invested Rs.2.51 to 3 lac and 11.48 percent’s capital involvement has been found to be varied from Rs.1.51 to Rs.2.5 lac.

“You can’t cross the sea merely by standing and staring at the water.”

– Rabindranath Tagore

On the contrary, a little more than 2/5th of the total entrepreneurs have invested a bulk amount from their own resources to run their enterprises. It is highly interesting that in case of 12.64 percent agripreneurs, the amount of investment was found to be Rs.4.51 to Rs.5 lac and surprisingly enough that 12.64 percent ex-trainees already made investment of Rs.5.1 lac and above.

VIII. Annual Net Income

Information was also sought from the agripreneurs in respect of their Annual Net Income. In accordance with their responses, 73.52 percent has acknowledged the income generated from their enterprises. Earning of 54.02 percent respondents has been reported to be around 1 lac while 19.5 per cent trained-respondents' annual income ranged from Rs.1 to Rs.2 lac. Undoubtedly, it is a good trend that agripreneurs have started earning from their initiatives.

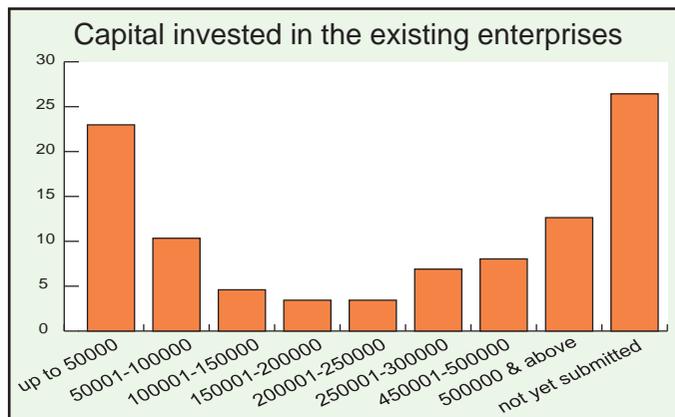
IX. Switching over to other enterprises

Obviously it is a prudent decision of switching over to potential enterprise from the previous one which was decided prior to joining the training programme. But this type of agripreneurs was only 12.64 percent as has been evident in the study. Normally rural persons hardly come out from their known arena, but probably the training inputs from SAMETI equipped them to think for new venture.

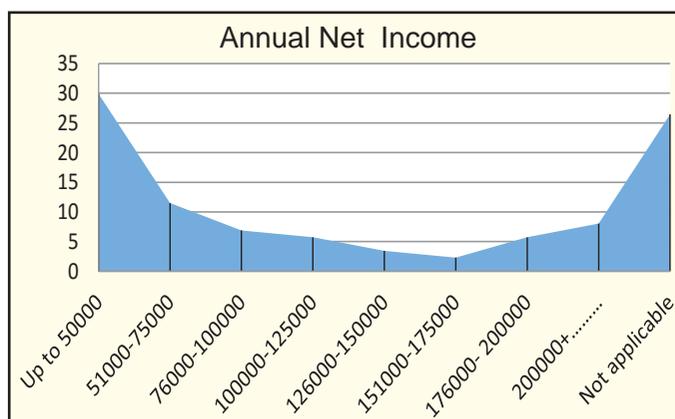
X. Impresion about SAMETI

Ex-trainees have been reported to have good faith on SAMETI as 74.71 percent agri-preneurs confirmed their continuous contact with SAMETI even after completion of their training courses. Three major reasons were mentioned by them for maintaining liaison with SAMETI. 52.87 per cent contacted for sanctioning of their project proposals submitted to Banks, different queries regarding their enterprises compelled the ex-trainees for to contact with SAMETI & 4.06 percent sought advices regarding availability of better agricultural inputs.

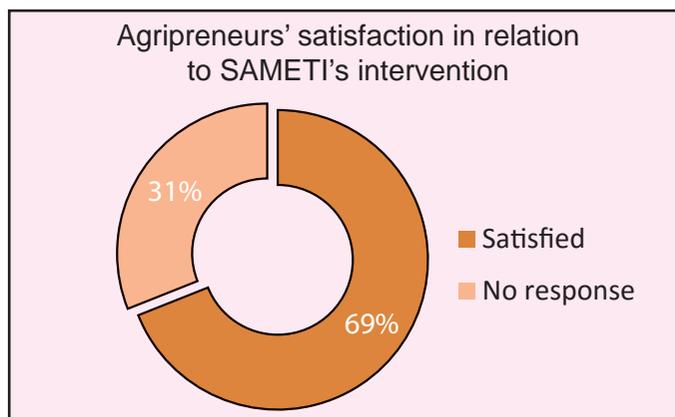
As regards their satisfaction in respect of intervention



Graph 8



Graph 9



Graph 10

“Finish the few duties you have at hand, and then you will have peace.”

– Sri Ramakrishna

of SAMETI, 68.96 acknowledged their positive impression about SAMETI’s efforts and advices.

XI. Desire for attending further Training Programme at SAMETI

Ample number of ex-trainees of AC & ABC programme felt to undergo further training programmes at SAMETI. This group of ex-trainees constituted 85.05 percent and they have suggested 12 areas for development of their capacity. Soil testing was favoured by 25.28 percent and the rest respondents have shown their interest in Vermi Composting, Fishery, Poultry, Animal Rearing, Pest Management, Goatery & Mushroom etc.

Table : 1 Intending Agripreneurs to undergo further training at SAMETI

Sl. No.	Type of Training Programme	Agripreneurs (in %)
1	Enterprise Management	3.45
2	Vermi Composting	10.35
3	Soil Testing	10.35
4	Fishery	8.05
5	Poultry	8.05
6	Animal Rearing	10.34
7	Bonsai	5.75
8	Fruit Farming	5.75
9	Application of Fertilizer and Pesticide	8.04
10	Plant Disease	4.59
11	Goatery	5.75
12	Mushroom	4.59
13	Not interested	14.94
Total		100.00

XII. Problems being faced by the Agripreneurs

Majority of the entrepreneurs have already started their enterprises just after the completion of their training programme at SAMETI. Apart from Bank loan they come across some other critical problems. Five different such issues have been identified by the ex-trainees. Delay in getting Bank loan was supposed to be the crucial problems to 95.40 percent ex-trainees, 31.03 percent encountered non-availability of proper market, paucity of required finance in the beginning phase happened to 29.08 percent, 14.94 faced problem related to license and finally 21.83 percent agripreneurs have pointed out out weather abnormal climatic condition also which is obviously very tough to compromise.

XIII. Services to Farming Community

Since this one is one of the priorities of this ACABC programme, so, with a view to assessing the ex-trainees’ endeavour for extending services to the community, they were asked to mention the nature of services being extended to the fellow farmers by them. Obtained data revealed that 80.45 percent respondents helped farmers resolve their problems whereas 8.04 percent admitted to share their expertise with some neighbouring farmer-entrepreneurs for management of their enterprises.

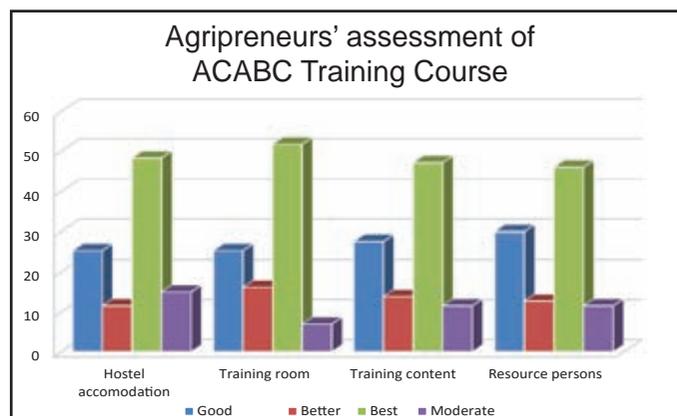
“All the wealth of the world cannot help one little Indian village if the people are not taught to help themselves”

– Swami Vivekananda

XIV. Opinion on ACABC Course

Normal practice of SAMETI is to get feed-back from the participants just after completion of the course, but they were further asked to express their views on qualitative aspects of the ACABC training programme. First, on training content where 51.72 believed the programme as the Best, 27.58 considered the same as Good while training content seemed to be better to 13.75 percent ex-trainees. Regarding Resource Persons, 45.97 thought Best, 29.88 opined Good and 12.64 considered the course as Better. Finally, Hostel facility was supposed to be the Best to 48.27 percent, Good to 25.28 percent and 11.49 percent trainees thought it better.

So, all these aforesaid observations may lead to conclude that the ACABC Training Programmes have certainly made a positive impact over the agripreneurs to a great extent but at the same time a few areas identified by them solicit SAMETI's intervention. The most disheartening factor, to be precise, apathetic attitude of Banks to sanction the agripreneurs' loan proposals has inhibited the zeal of the agripreneurs. This scheme will get its momentum when financial institution will come forward to be the co-partner of the agripreneurs' venture.



Graph 11

Men are more valuable than all the wealth of the world

– Anonymous

V

EXPLORATION & DOCUMENTATION OF SUCCESS STORIES

A. DAESI CASE STORIES

1. Chiranjib Gharami, Keorakhali, Pathar Pratima, South 24 Parganas

I have a licensed Agri-input shop at Keorakhali of Pathar Pratima, South 24 Parganas. Getting information from the Assistant Director of Agriculture of our block, I took admission in DAESI programme at SAMETI, Narendrapur in August, 2013 and regularly I attended the classes at Ramakrishna Ashrma KVK, Nimpith. This Diploma course helped us to change ourselves from a mere “sales personnel” to an “extension agent” in the agro-society. Farmers are now coming to us with more expectation and trust. We are now not only “input dealers” but also “information dealers”.



2. Himangshu Halder, Uttar Kumrapara, Raidighi, South 24 Parganas

Earlier we were only business partners of the farmers. But now we care for their livelihood as we know that our livelihood is not sustainable without of theirs. Through DAESI programme I learnt the use of Information and Communication Technology (ICT) by which I can collect and transfer any agricultural information to the farmers readily. Now farmers see me in other eyes and always try to enquire with me about new and effective technologies/ methodologies on plant protection and soil health aspect.



3. Md. Siddique Ali Gazi, Kumarhat, Baruipur, South 24 Paraganas

Knowing that a course will be organized for the input dealers for their knowledge up-gradation at SAMETI, Narendrapur, I contacted with the Assistant Director of Agriculture. Along with others dealers I joined the programme at SAMETI, Narendrapur. During the last 12 months, I think myself a changed person in terms of knowledge in agriculture, especially in plant protection and soil health management, to do my business in better way and above-all to be accepted by the farmers as their friend and adviser.



4. Subrata Naskar, Uttar Kalyanpur, Baruipur, South 24 Paraganas

I was a mere input dealer one year ago. But now I think myself a person, who knows at least something about

“Be the change that you wish to see in the world.”

– Mahatma Gandhi

agriculture, different ways of pest management, specially eco-friendly agriculture and definitely about how to do a good business. I am ashamed that previously unknowingly we recommended inappropriate inputs to the farmers, but I now I am in a position to repay all those mistakes. If I am able to keep the soil and environment of the field of the farmer healthy, farmers will automatically receive cost –effective good yield. And in turn the farmers will not leave my shop. Whenever I am in in-decision, I use to call the my teachers and get the appropriate solution and also learn that. The telephone number of the all of my teachers is a big strength to me.



5. Nirmal Ray, Langalberia, Sonarpur, South 24 Parganas

Though I have a shop on agricultural inputs, frankly speaking I didn't know many things about agriculture, which an agricultural input dealers should know. I was interested about my business but I had no idea that basic knowledge of the component surely can boost the business volume and profit. During these 12 months period I have learnt not only about agriculture but also I found may ways to take this knowledge to do the business in far better way.



B. AC-ABC CASE STORIES

Success Stories: 1

Mr. Muktipada Das, ID-WB0846 Male, Age-33, of Kantapal (Village), Alikashano (Gp), Dantan (Block), Paschim Mednipur (Dist.), West Bengal (State) was an Un Employed 10+2 Agriculture passed.

After came to know about the training programme, he applied for the ACABC and selected for training during 30th January to 30th March, 2013.

NTI submitted the DPR on Fertilizer, Pesticide and Seed Business cum Agro-Service Centre to the United Bank of India for sanctioning the loan. NTI provided the types of handholding like re-writing of project, personal visit to Bank, interaction with the Block ATMA Officials, linkage with the NABARD Officials, etc.

The bank officials visited the place of the candidate and sanctioned the loan of an amount of Rs.20.00 lakh after fulfilling the loan criteria and disbursed the 1st instalment within 3 month.

NABARD also released the subsidy component within 2 month of submitting the proposal by the Regional Office, UBI.

Now, Mr. Das is running the centre with a turnover of an amount of Rs.68.00 lakh and net profit is Rs. 9.60 lakh per annum. Mr. Das has also build up a strong farmers network by providing the latest agricultural technologies consultancy.



“Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.”

—1st Earl of Chatham, William Pitt

Case Study: 2

Mr. Joydeb Patra, ID-WB 0859 Male, age-28 of Dhuria (Village), GP: Aikash G.P-1, Dantan - 1, Paschim Medinipur (District), West Bengal was an Un Employed 10+2 Agriculture passed.

After came to know about the training programme, he applied for the ACABC and selected for training during 30th January to 30th March, 2013.

NTI submitted the DPR on Poultry Rearing, Processing cum Agro-Service Centre to the United Bank of India, Alikaha Branch for sanctioning the loan. NTI provided the types of handholding like re-writing of project, personal visit to Bank, interaction with the Block ATMA Officials, linkage with the NABARD Officials, etc.



The bank officials visited the place of the candidate and sanctioned the loan of an amount of Rs. 4.96 lakh after fulfilling the loan criteria and disbursed the 1st instalment within 2 month.

NABARD also released the subsidy component within 2 month of submitting the proposal by the Regional Office, UBI.

Now, Mr. Patra is running the centre with a turnover of an amount of Rs.18.00 lakh and net profit is Rs. 4.8 lakh per annum. Mr. Patra has also build up a poultry growers network by providing the chick, feed, vaccination and technologies consultancy.

In addition of his poultry rearing, he is also set up a nursery for forest plant by his own fund. From the nursery he is earning Rs. 1.8 lakh per annum. He is selling the planting materials to different local bodies and people.

Case Study: 3

Mr. Swapan Kr. Maity, S/O - Kedar Ch. Maity, Vill.- Patna, PO - Baraudaypur, GP - South Khanda -13 No., Block - Patashpur - 2, Dist. - Purba Medinipur, WB, Pin - 721456 was an unemployed 10+2 Agriculture passed.

After came to know about the training programme, he applied for the ACABC and selected for training during 5/8/2013 to 3/10/2013.

He has been running the selling of agril. Input for 3 years before participating the training programme.

He applied for loan to United Bank of India, Branch: Argoal, Purba Medinipur for Rs.5 lakh.

Though he has no loan from any bank but the bank official denied for bank loan by citing a unacceptable reason.

After getting the training Mr. Maity has been motivating more farmers by providing his expertise and in reputation of a trained candidate.

His existing business increased in two times than earlier without much more investment and he net profit is Rs.2.00 lakh per annum.



Case Study: 4

Mr. Bidur Maji, S/O - Kali Sadhan Maji, ID - WB0975, Vill: Kadam Diha, P.O. Garbetta-III, Dist. - Paschim Medinipur, WB, Pin-721253 was an unemployed 10+2 Agriculture passed.

“Agriculture is the noblest of all alchemy; for it turns earth, and even manure, into gold, conferring upon its cultivator the additional reward of health.”

– Paul Chatfield

After came to know about the training programme, he applied for the ACABC and selected for training during 5/8/2013 to 3/10/2013.

NTI submitted the DPR on Poultry Rearing, Processing cum Agro-Service Centre to the United Bank of India, for sanctioning the loan. NTI provided the types of handholding like re-writing of project, personal visit to Bank, interaction with the Block ATMA Officials, linkage with the NABARD Officials, etc.

The bank officials visited the place of the candidate and turned down the loan application.

Mr. Maji started the poultry rearing cum agro-service centre with his own fund of an amount of Rs. 3.5 lakh

Now, Mr. Maji is running the centre with a turnover of an amount of Rs.10.00 lakh and net profit is Rs. 1.5 lakh per annum. Mr. Maji has started a feed business and provided the technologies consultancy.



C. NMOOP CASE STUDIES

1. Cittaranjan Mondal : Successful white sesame producer

Sri Cittaranjan Mondal of village Srinagar, Keshpur, Paschim Medinipur, is very much successful in producing white til in 9 biha of land. This cultivation has been initiated by the Agricultural Training Centre, Ramakrishna Mission Asharama, Narendrapur, Narendrapur, with the help of National Mission on Oilseeds & Oil palm (NMOOP) for one biha as demonstration in the last year. As the part of Scheme, Agricultural inputs like seeds, water carrying pipes, seeds treatment drums, seeds storage bins, fertilizers, pesticides, sprayers and trainings have been provided by ATC, R K Mission Asharama, Narendrapur. In this year, he cultivated in 9 bighas and produced 1.2 ton white til in his own support. He expended Rs. 25,000 for the total cultivation and earned Rs. 60,000. His net profit is around Rs. 35,000 from the land. According to him, Initially market was a problem. Now buyers are coming to them. He wants to increase til acreage and helps others to cultivate white sesame.



2. Banshari Jana : Successful Sunflower producer

Sri Banshari Jana Of village Buchabandi, Keshpur, Paschim Medinipur, is very much successful in producing sunflower in 3 biha of land. This cultivation has been initiated by the Agricultural Training Centre, Ramakrishna Mission Asharama, Narendrapur, Narendrapur, with the help of National Mission on Oilseeds & Oil palm (NMOOP) for 10 khatha as demonstration in the last year. As the part of Scheme, Agricultural inputs like seeds, water carrying pipes, seeds treatment drums, seeds storage bins, fertilizers, pesticides, sprayers and trainings have been provided by ATC, R K Mission Asharama, Narendrapur. In this year, he cultivated in 3 bighas and produced 1 ton in his own support. He expended Rs. 30000 for the total cultivation and earned Rs. 50,000. His net profit is around Rs. 20,000 from the land. He wants to increase acreage and helps others to cultivate sunflowers.



“Anyone who has never made a mistake has never tried anything new.”

– *Albert Einstein*

VI EXTENSION PROGRAMME

A: NATIONAL MISSION ON OILSEEDS AND OIL PALM (NMOOP)

National Mission on Oilseeds and Oil Palm (NMOOP) launched during 2014-15 envisages increasing production and productivity of oilseeds crops and oil palm through bringing in fallow areas under oilseed crops and diversification of area from low yielding cereals. It aims to achieve the required target by addressing major constraints to crop productivity through promotion of relevant technological interventions. The experience gained during the course of implementation of Integrated Scheme on Oilseeds, Pulses and Maize (ISOPOM) has revealed that a sound backup of adaptive/strategic research strategy in emerging areas to bridge the yield gap is essential for the Mission to be successful. Moreover, many technological interventions need location-specific refinements for ensuring their effectiveness at the grass root level. Besides, a good number of innovations made by the farmers/ extension functionaries need scientific validation before their large scale promotion. In a few instances, there is lack of resource-relevant technologies for addressing crop productivity related constraints. In view of the above, a provision has recently been made under NMOOP for supporting scientific research on subjects crucial for attaining goals of the Mission during the 12th Five Year Plan. This makes it necessary to develop guidelines detailing procedure for funding and monitoring of projects under Mission sponsored adaptive / strategic research component in a systematic way.

Themes/ areas of research:

Financial support will be available for adaptive/strategic research in the following Areas:

1. Crop improvement including planting materials but excluding basic research.
2. Crop production including cropping systems, inter-cropping etc.
3. Integrated pest management.
4. Water use efficiency.
5. Integrated plant – nutrient management including precision farming.
6. Post harvest management including oil extraction efficiencies.
7. Seed production technology.
8. Farm mechanization.
9. Any other research area for enhancement of oilseed crops production and productivity.

Nature of research qualifying for support:

- Adaptive/strategic research that aims at refinement and value addition to existing crop production / resource conservation/post-harvest technologies through farmers' participatory programme.
- Addressing research gaps crucial to accomplishment of objectives of the Mission in short/medium term so that the outcome is available within 2 years for adoption on large scale.
- Scientific validation of innovative technologies made and used by farmers.

“Let New India arise – out of the peasants' cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

– Swami Vivekananda

- Anticipated outcome of the project should be practically feasible and economically viable.

Various components of the Scheme:

1. Production of quality oilseeds.
2. Conducting Training of Farmers and Officers or Extension Workers.
3. Conducting crop demonstration (DC).
4. Supplying principal nutrients (P).
5. Distribution of pipes for carrying irrigation water.
6. Distribution of plant protection equipments.
7. Distribution of plant protection chemicals.
8. Distribution of seed bins for proper storage.

The physical achievement of oilseed, under this programme from 2004 – 05 to 2014-15 is as under.

Oil seeds:

Year	1. Rape & Mustard			2. Groundnut		
	Quality seed distributed (Kg)	Area covered (Hectare)	Farmers benefited	Quality seed distributed (Kg)	Area covered (Hectare)	Farmers benefited
2004-05	2113	282	2107	7485	100	750
2005-06	3000	400	3000	9380	120	900
2006-07	1171	166	1245	7980	106	795
2007-08	869	116	870	5250	70	525
2008-09	935	125	938	14580	194	1455
2009-10	0	0	0	3900	52	375
2010-11	375	50	375	4470	60	450
2011-12	450	60	450	10680	142	1065
2012-13	450	60	450	7290	97	727
2013-14	0	0	0	0	0	0
2014-15	175	25	566	1500	25	358
Total	9538	1284	10001	72515	966	7400

“Do not afraid; the Master is behind you, and I am, too, as your Mother”

– Sarada Devi

Year	3. Sesame			4. Sunflower		
	Quality seed distributed (Kg)	Area covered (Hectare)	Farmers benefited	Quality seed distributed (Kg)	Area covered (Hectare)	Farmers benefited
2004-05	450	60	450	630	126	1890
2005-06	974	130	974	1075	215	3225
2006-07	371	49	367	500	100	1500
2007-08	272	36	270	564	125	1875
2008-09	664	88	660	0	0	0
2009-10	230	31	230	0	0	0
2010-11	1000	133	1000	1000	200	3000
2011-12	1000	133	1000	1425	285	4275
2012-13	2721	362	2721	1425	285	4275
2013-14	3000	400	3000	2000	400	3000
2014-15	350	50	412	750	150	1423
Total	11032	1472	11078	9369	1873	27463

Final Physical Report of NMOOP (2014-15)

Sl.	Components	Physical Target (ha)	Achievement (ha)	No of Benefited Farmers
	Oilseed Development Programme			
1	Rapeseed & Mustard DC	25 ha	25 ha	566
2	Groundnut DC	25 ha	25 ha	358
3	Sunflower DC	150 ha	150 ha	1423
4	Sesame DC	50 ha	50 ha	412
5	Farmers' Training	18 nos.	18 nos.	920
6	Officers' Training	2 nos.	2 nos.	64
7	P. P. Equipments (Power)	20 Nos.	20 Nos.	125
8	Distribution of SSP	1000 ha	1000 ha	2850
9	Seed Storage Bins	400 Nos.	400 Nos.	400
10	Seed Treatment Drums	400 Nos.	400 Nos.	1250
11	Pipes for Carrying Water	1500 metre	1500 metre	840
12	P.P. Chemicals	680 ha	680 ha	4212
13	Chem. & Bio Pesticides	Rs. 113475	Rs. 113000	950

“As long as I live, so long do I learn.”

– Sri Ramakrishna

Market linkage:

The main hurdle of our farmers is that they fail to get good price from their produce, especially for new introduced crops like sunflower & white sesame. In order to solve such problems contact was made with various companies and we have been successful to link their produce with the markets and the farmers cultivating sunflower & white sesame are getting good price now. We are pioneer in motivating farmers to grow white sesame in various blocks of Paschim Medinipur districts such as Keshpur, Chandrokona-I, Chandrokona-II, Dashpur, Sabong, Pingla etc. and South 24 Pgs. to some extents since 2008-09. Now a well established market has been developed and farmers are getting more remunerative price from their produce. About 370 bigha of white sesame were cultivated in the last year and the farmers received 20-25 percent more price than conventional brown sesame like Tilottama, Rama etc. Similarly sunflower areas are being increased. We organized training workshop in Patharpratima block. The farmers are extracting oil from their produce to sell in the market. So, the market sale price sunflower has been increased 20 per cent or more than earlier. So, the farmers are very much benefited as the cost for post harvest operations are reduced.

Farmers' Service Centres

Farm machineries like seed dressing machines, seed storage bins, delivery pipes, plant protection equipments etc. are being provided to the farmers. But such supports are not sufficient to cover all the farming community. So, in order to serve most of the farmers have developed Farmers' Service Centres in most of the organizations where farm machineries, delivery pipes etc are kept ready and provided to the farmers against a small service charge. Such service charges are 40-50 percent less than the local charges. Registers are maintained and money is collected through receipt. The fund such collected are divided into three portions. One portion is kept for maintenance of machineries and purchase of extra machineries as required, the second portion is given to one of the workers who are maintaining the entire system and the other portion is kept for development purposes of the organizations. In such ways the farmers are being served as well as the youth organizations engaged in such purposes are being benefited making the NMOOP scheme in a sustainable manner. We have extended our activities related to implementing NMOOP in eight districts so far (South 24 parganas, North 24 Parganas, Howrah, Purba Medinipur, Paschim Medinipur, Burdwan, Bankura and Purulia) of this state as per strength our network, the youth organizations.

Information Services

Technical literature cultivation in the form of leaflets was distributed to the farmers to back up demonstration and training programmes. 5000 copies of 'Oilseeds cultivation' were published in Bengali. Besides these following books were distributed to the farmers Two CDs were developed on 'Sunflower' and 'Groundnut' cultivation so as to broaden the information base of the farmers.

Agricultural Sustainability

The Training Centre is trying to run the scheme on a sustainable way and with the consideration following strategies have been taken:

- 1) Involvement and motivating farmers as well as involvement of village youth clubs. More than twenty cluster organizations and 260 youth organizations are participating in all activities such as selection of farmers, selection of demonstration site, organizing the farmers ensuring participation of the farmers

"I tell you one thing - if you want peace of mind, don not fault with others."

– Sarada Devi

in training programmes. The progressive farmer-members of the organizations are being trained and they are being utilized as muster trainers so that they can assist to motivate the other farmers towards improved technology. Efforts are being taken to mobilize the farmers in group formation which are serving dual role i.e. as leaders in development process and as knowledge base for the farmers. Above all, village level youth clubs through whom the programmes are being implemented are permanent feature of the village. Hence, Training and skill imparted to the village youths will also continue to translate into practice leading to the sustainability of the project.

- 2) Linkage with local panchayet and state agriculture department in implementing the scheme.
- 3) Coordinating and supervision of various activities of the scheme by the faculty members of the Institution on a regular basis.
- 4) Involvement of Block Agricultural Officers and Krishi Prayukti Sahayak (KPS) in demonstration, training programmes and workshop organized at the beginning of crop season.



B. BIO VILLAGE

Heavy use of different synthetic inputs in agriculture, especially the toxic pesticides and fertilizers causing harm to the environment to a great extent and deteriorating the soil health, on which agricultural system is largely dependent. To combat that ill effect, the crops have to be fed and protected largely by non-toxic bio-based inputs along with the change in mindset of the farmers, which is not at all an easy task. The State Govt. took the task through a programme in the title 'Bio Village', as it is essential towards sustainability of agriculture, environment and ultimately for the human-being. The Institute has been entrusted by the



“Let New India a rise-out of the peasants’ cottage, grasping the plough; out of the huts of the fisherman, the cobbler, and the sweeper”

— Swami Vivekananda

Department of Agriculture, Govt. of West Bengal with the implementation of this Bio village scheme/ project in four districts in last two years. The places of implementation are given below in the table.

Sl. No.	District	Block	Village	Associated organization
1	Burdwan	Ausgram-1	Sukhadanga	Lamps Co-oprative Society
2	Birbhum	BolpurSriniketan	Kamalakantapur	Samaidah Krishi Agar
3	South 24 Paraganas	Baruipur	Teurhat	Pally Mangal samity
4	Hooghly	Khanakul-1	Udaypur	Sarvik Vivekananda Gram Seva sangstha

The strategy for rural livelihood enhancement is designed keeping the sustainability factor in mind. The first and foremost thing is identifying the most suitable livelihood activities for this particular bio-village project. This is done with an appropriate base line survey on the basis of own land (minimum 2.5 bigha), status of soil fertility, no. of cattle (minimum no. 2), availability of cow dung/ bio mass, status of pesticides / fertilizers use, present cropping pattern, perception about cost – benefit ratio, level of technical knowledge and attitude about organic farming from 50 no. of farm families of above mentioned four villages in each districts.



The survey provides enough inputs to find out the gap or constraints in the livelihoods of the local populace of four villages. The resource conservation is designed keeping in mind the livelihood needs of the project area and the livelihood interventions were designed accordingly on the basis of

- Awareness meeting with the farmers adopted Bio-village with a minimum of 90 farmers
- Formation of farmers group, group leaders, and group planning workshop at village level
- Seed treatment Campaign through awareness meeting
- Through group plan workshop at village level for promotion of ITK (Panchagovva, Sashagovva preparation, etc.)

The major part of the project includes, base line survey & Documentation, Awareness meeting, Formation of farmers' group, group leaders & crop planning, Village level training in FFS model, Seed treatment campaign, group plan workshop particularly for the promotion of ITK, application of bio-agents, Bio - pesticides &

“I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy.”

– *Rabindranath Tagore*

microbials and other bio agents, preparation of Vermicompost and azolla pit, residual toxicity test, Exposure visit report preparation etc. has been completed in four villages, which fruitfully used by the beneficiaries. Now vermicompost is prepared in their own hand. Beneficiaries of four Bio village villages understand Agriculture being the back bone of rural economy & livelihood, one has to harness those strength and eradicate prevailing problems to facilitate the local community earn and enhance their livelihood. Sample test for the crop residual toxicity measurement was done and found below detection level.



“Science without religion is lame, religion without science is blind.”

– Albert Einstein

VII METEOROLOGICAL OBSERVATION & ANALYSIS

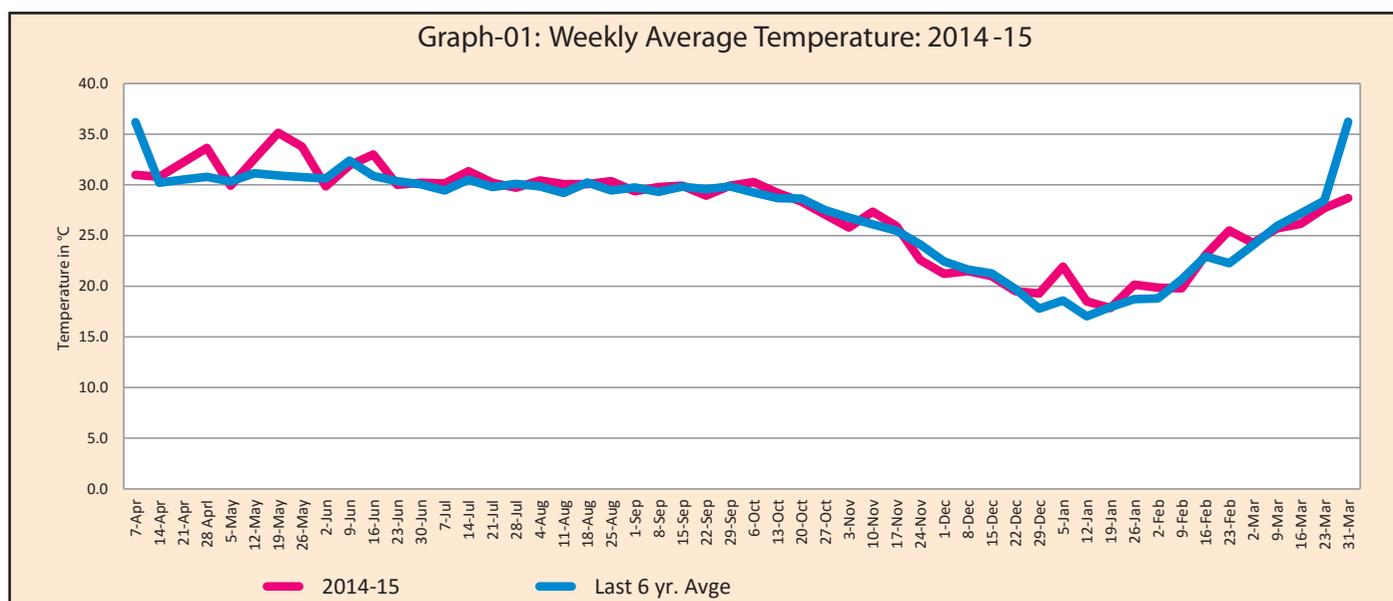
Agriculture is multidisciplinary subject, where application of knowledge of different fundamental subjects are considered as independent factors of the production, productivity and quality of the agricultural produces.

As an institute of HRD in the sector of agricultural technology, agricultural extension and management, the regular meteorological data is very important for the institute to support and boost the study and research.

The farm section of the institute with a humble unit to record temperature, relative humidity and rainfall through Maximum-Minimum Thermometer, Hygrometer and Rain Gauge at farm situation provides valuable data on daily weather. Every day observations and record of all the above-mentioned weather parameters are taken at 6.00 am. With the completion of the year, data are compiled, analyzed and interpreted with the expertise available. The strength of this meteorological unit is regularity and sincerity rather than sophistication.

In the reporting year/period (1 April, 2014 to 31 March, 2015) many important aspects of weather are noticed.

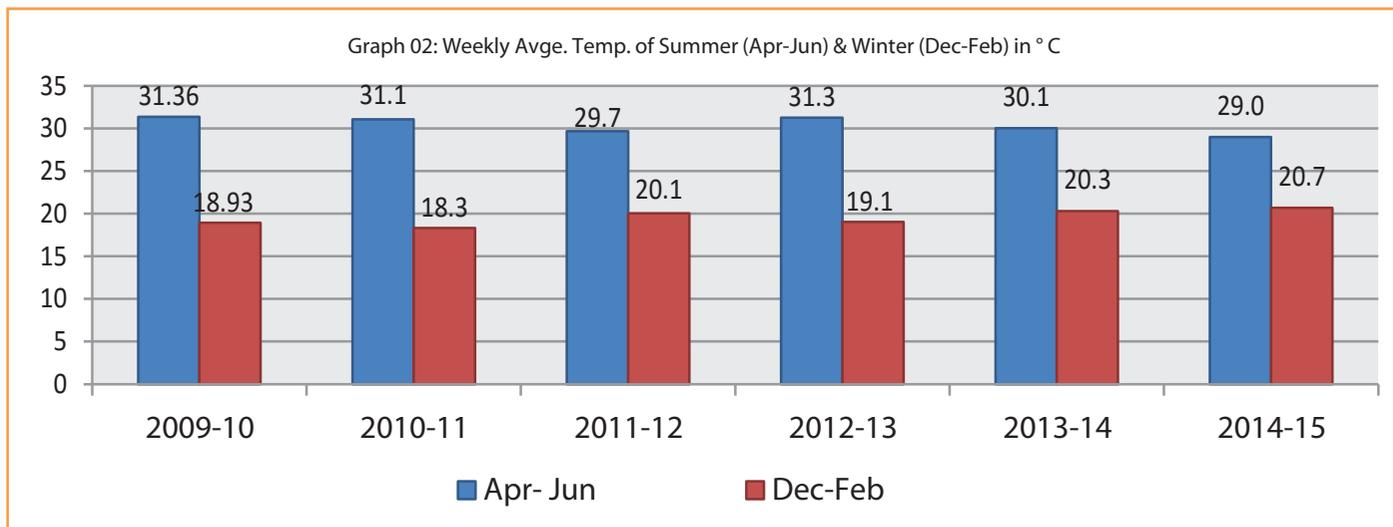
42°Celsius (°C) was the Maximum Temperature of the year on the date 20th May, 21st, where as the next highest temperature was 41°C and that happened in nine different days (12th May, 14th May, 16th May, 17th May, 19th May, 21st May, 22nd May, 23rd May and 24th May). It is very important to note, as in last six years the highest maximum temperature of Narendrapur was 41°C on 11th and 12th April of 2010 and such a high temperature (40°C or more) didn't persisted for such a long period.



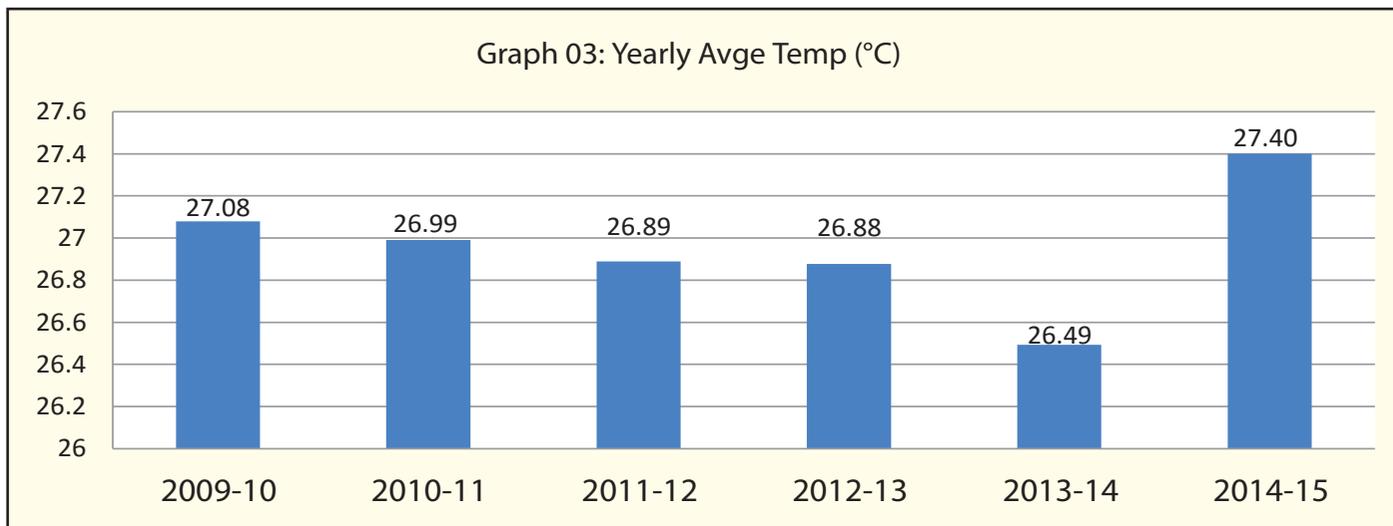
The warmest week [Σ (daily Ave. Temp, of the Wk.) / 7; Max. range] of the year was 13-19th May, 2014, when weekly average of Max. temperature was 35.14°C. (Graph 09, Graph 03). Last year the same was 37.28°C and in previous five year's that moved from 32°C to 34°C. So there is a little trend of increase in Maximum temperature during last six years. No significant change in time of occurrence is noticed in this regard.

“The best way to find yourself is to lose yourself in the service of others.”

– Mahatma Gandhi



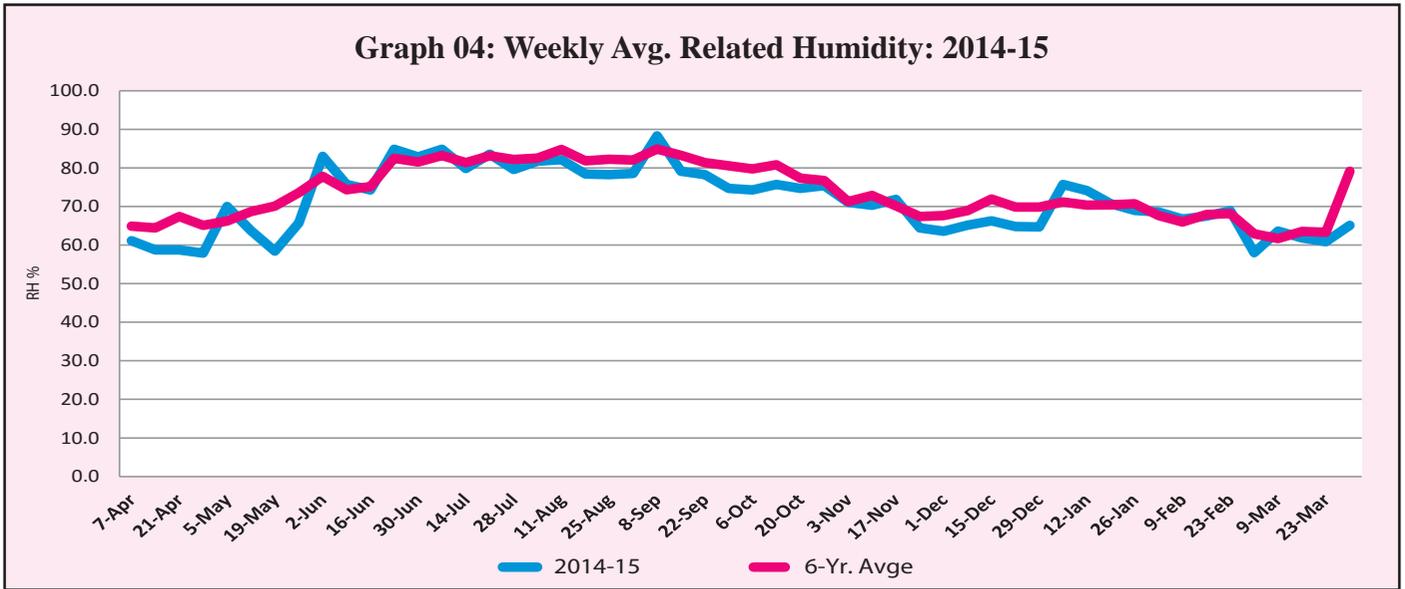
10°C was the lowest temperature of the reporting year (2014-15) and it happened on 20th January, 2015. The coldest day of the previous year were 10th and 11th January and 3rd February of 2014 (Graph 09) with 11°C. Though it was lower than the immediate previous year, it was higher than the last five years record, which were in between 7°C to 9°C. The usual occurrence of the coldest day happens to be between 2nd - 4th week of January.



17°C was the minimum temperature average of the coldest week [\sum (daily Ave. Temp. of the Wk.) / 7; Min. range] of the 2014-15, which occurred during 13-19 January, 2015 (Graph 09, Graph 02). The coldest week of the last year was 3rd week of February, 2014. The average Minimum Temperature of that week was 16°C. Though time of occurrence is fluctuating in last six years between last week of December and 2nd week of February, the temperature value is within narrow range of 16°C – 17°C.

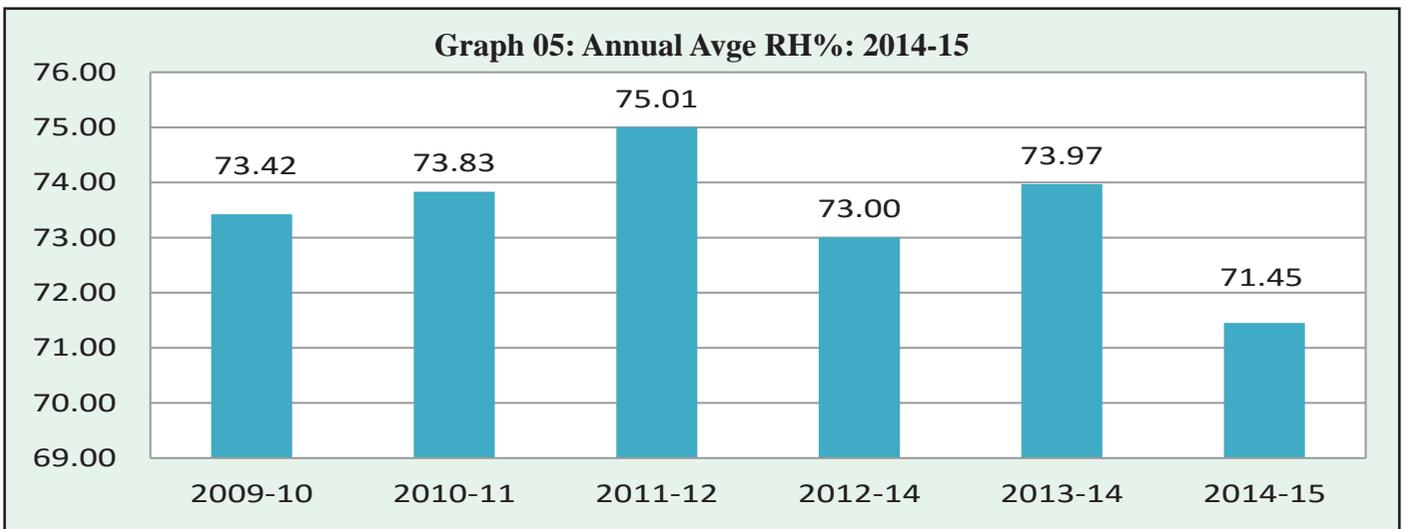
Regarding temperature of farm condition of Narendrapur, though in last five years the Annual average

“He alone is the true teacher who is illumined by the light of true knowledge.”
 – Sri Ramkrishna



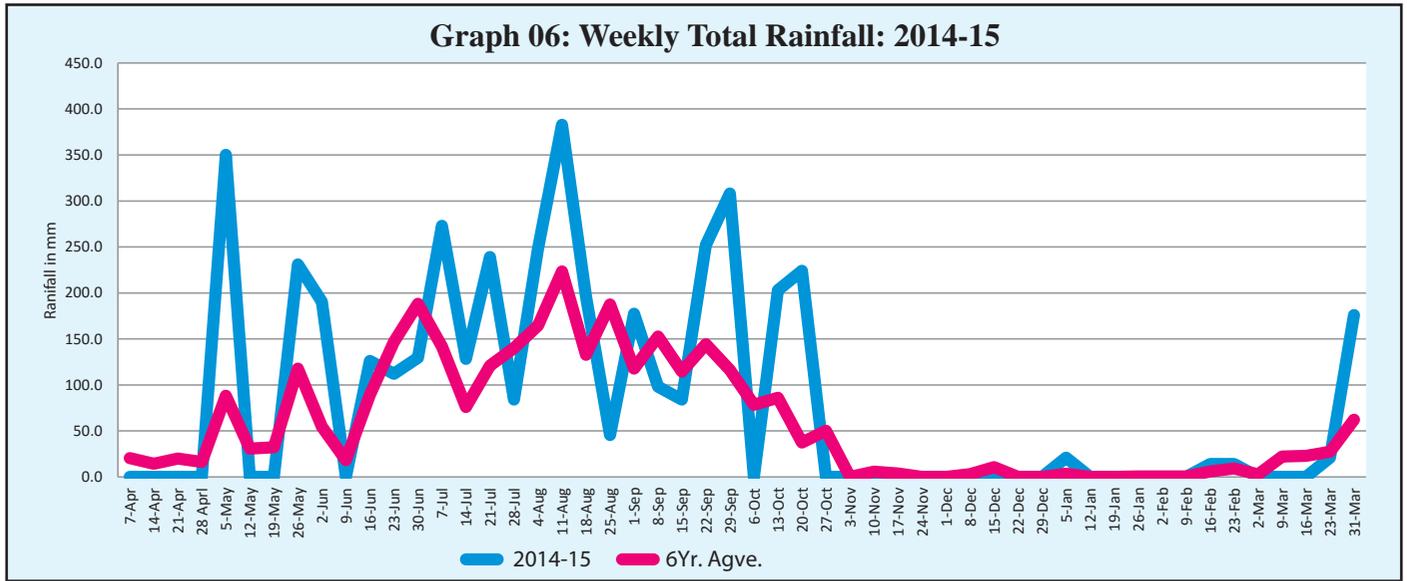
temperature [\sum (daily Avge. Temp of the Yr.) /365] was decreasing (since 2009-10 to 2013-14 are 27.08°C, 26.99°C, 26.89°C, 26.88°C and 26.49°C respectively), this year it increased to 27.4°C (Graph 03).

57.93 % was the lowest relative humidity (RH) as weekly average, which occurred during 22-18 April, 2014. The lowest RH during 2013-14 was recorded during 2nd week of April, 2013 with no significant difference (57.6 %). From 4th week of May to last week of December, 2013 the weekly average of the RH never went below 70%. The humidity range through out the year is more or less with same trend of the average of last six years, though the annual average is little bit lower (71.58) in comparison to the result of the last five years (73.84%) [\sum (daily Avge. RH)/365] (Graph 04, Graph 05, Graph 09). This year the Annual Total Rainfall was conspicuously high amounting 4083 mm contrasting to last year total rainfall of 2374 mm and an Average Total rain fall of last five years giving 2814 mm (Graph 06, Graph 07, Graph 09).

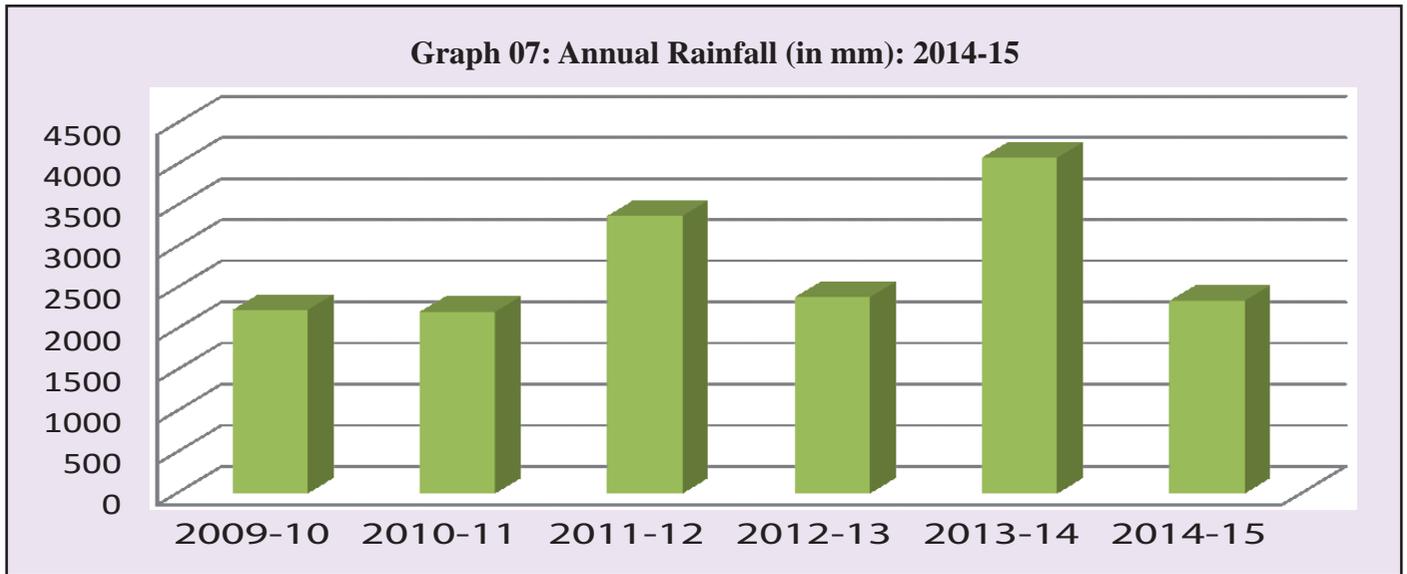


“The brain and muscles must develop simultaneously.
Iron nerves within intelligent brain – and the whole world is at your feet.”

– Swami Vivekananda



Maximum rain fall occurred during the reporting period on 8th August, 2014 and the amount was 128 mm. The Maximum Rainfall in a day during 2013-14 was 21st August, 2013 with 266mm, which was almost double of the reporting period. The other significantly higher rainfall day was 18th July, 2014 with 120 mm. The week (13-19 August, 2014) was the maximum rainfall week [$\sum(\text{daily Avg. RH})/365$] with 382 mm (Graph 06, Graph 09).

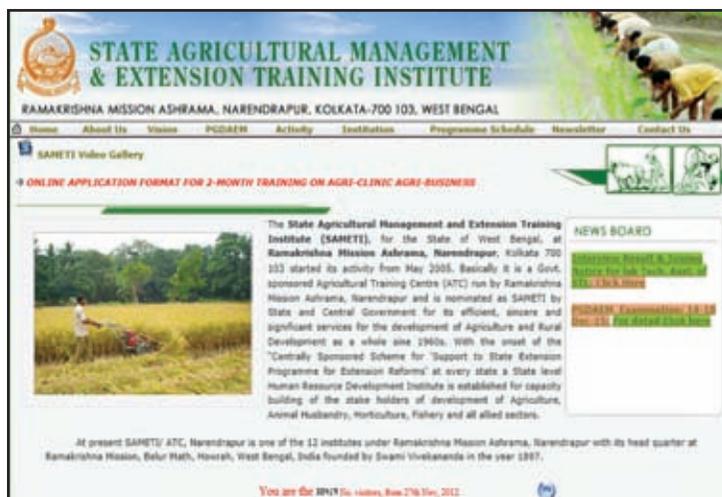


With a total weekly rainfall of 382mm, 4-11 August, 2014 week was the highest rainfall week of 2014-15. During the previous year, 19-25 August, 2013 was the maximum rainfall week with 632mm, which was again almost double. As per last five years record the week with maximum rainfall generally falls between 1st week of August and 1st week of September. In that sense this was quite normal (Graph 09).

“One should desire of God desirelessness. Desire is the obstacle to liberation.”
 – Sri Sarada Devi

VIII PUBLICATIONS

Anyone can easily get an idea institute by going through the publication of that institute. It self describes the activities of the institute, like a spokesmen. Similarly the website of the institute is the only document of the institute which can be browsed by any one throughout the world. The Institute has a regularly updated website: www.sametiwb.org of about 20 pages, displaying the programmes and activities of the institute along with other related information. Updated information, programme images, activity schedules are uploaded in the website on regular basis. Yearly tentative training programmes workshop-seminar, programme performed in the last year, important coming programmes etc. are displayed in the website. Important announcement and information like ATMA recruitment of different districts, schedule of PGDAEM semester examinations etc. are displayed in the website notice board in home page. Since 2006-07 annual progress report of the institute is available in the website in pdf form. The provision for on-line form fill up for the Agri-clinic and Agri-Business Centre (AC-ABC) has been developed in the home page of the website. Various notices of the institute, Govt. Departments related to agricultural reforms are being displayed in the website for interest of the people. Regular feed backs, information; suggestions are coming through website contact address. About 20000 people have clicked the website for various information.



The 'News Letter' of the institute is published regularly on quarterly basis. It is of four pages colour publication. The newsletter contains the news covering the major programmes performed by the institute, news pegs, coming programmes, about SAMETI West Bengal etc. The soft copies of all the newsletters are also displayed in the institute website in pdf form. The design of the newsletter has been changed five times since inception.

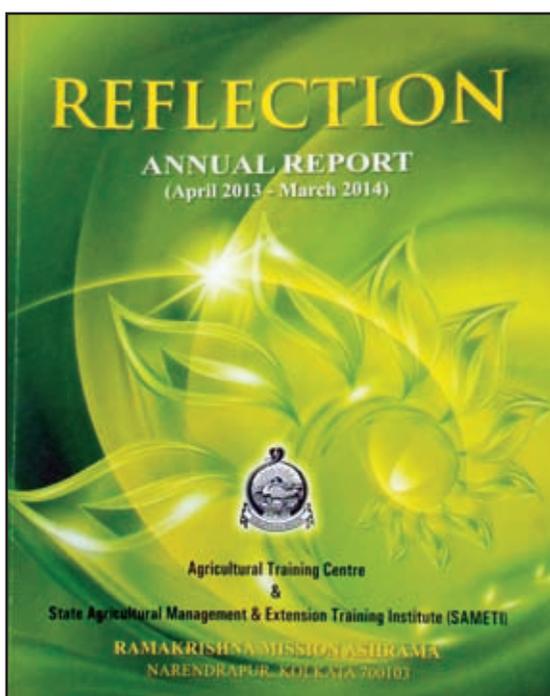
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"Finish the few duties you have at hand, and then you will have peace."

— Sri Ramakrishna

Since January, 2010 to March, 2014 the newsletter has published in 4 volumes & 21 numbers. List of are given below:

Sl. No.	Type of publication	Name of the Publication	About the publication (Language)
1.	Brochure	Diploma in Agricultural Extension Services for Input Dealers (DAESI)	Information related to the course including admission form.(Eng.)
2.	Brochure	Post Graduate Diploma in Agricultural Extension & Management (PGDAEM)	Information related to the course including admission form.(Eng.)
3.	Annual Report	Reflection	Annual report of the institute for the period April 2013 - March 2014 (Eng.)
4.	News Letter	SAMETI Quarterly News letter	News letter based on quarterly activities of the institute(Eng.)



“All the wealth of the world cannot help one little Indian village if the people are not taught to help themselves”

– Swami Vivekananda

IX FACULTY MEMBERS

The faculty members, the human resources, are the most important assets of the institute. Along with national and international exposures and education, all the members have continuous deep rooted relation and intervention with the rural life and its development.

A. Faculty members of the Institute:

Sl. No.	Name	Designation	Educational Qualification	Field of Specialisation
1	Dr. Manas Ghosh	Principal, ATC & Director, SAMETI	Ph. D. in Agricultural Entomology, PGDAEM	Plant Protection, IPM, Rural Development
2	Dr. Asutosh Das	Senior Lecturer	Ph.D., M.Sc(Ag.), PGDAEM	Medicinal Plant Management, ISOPOM
3	Dr. Satinath Das	Senior Lecturer	B.V. Sc, PGDAEM	Dairy Management
4	Sri Amiyakumar Raj	Senior Lecturer	M. Sc (Ag.) in Agricultural Extension	Leadership, Motivation
5	Sri Dilip Maity	Senior Lecturer	M.Sc. in Agronomy	Farm Management, Seed Technology
6	Dr. Sk. Musiar Ali	Senior Lecturer	Ph. D., M. Sc (Ag.) in Agricultural Extension	Extension Management, ICT in Agriculture
7	Dr. Kamalakanta Hajra	Senior Lecturer	Ph. D. in Plant Pathology	Plant Protection, IPM, Mushroom Cultivation
8	Dr. Sourendranath Das	Senior Lecturer	Ph.D. in Agricultural Entomology, PGDAEM	Botanical Pesticides Development, IPM
9	Sri Suvash Adak	Agronomist	M Sc. (Ag.)	Soil Science
10	Sri Soumyesh Mondal	Chief Instructor	M.Tech. Agricultural Engineering, PGDAEM	Soil & Water Engineering
11	Sri Subhrasil Basu	Faculty	M. Sc. in Sociology	Social Welfare, Mainstreaming Gender
12	Sri Asit Basu	Faculty	M. Sc. In Anthropology	Entrepreneurship Dev., Agricultural Marketing
13	Sri Ranjan Kanti Chatterjee	Faculty	Diploma in Engineering (Mech.)	Rural Engineering
14	Dr. Mohit Hossain	Faculty	MBBS	Health & Hygiene
15	Sri Debabrata Giri	Faculty	M.Sc. in Economics with Rural Dev., PGDAEM, B.Ed.	Rural Development, Project Management

Men are more valuable than all the wealth of the world

– *Anonymous*

B. Outside Faculty

	Name	Status	Qualification etc.
1	Sri Prasanta Dasgupta	Former Senior Lecturer, Agricultural Training Centre, Narendrapur	M.Sc. in Botany - Horticulture
2	Dr. Dibyendu Sen	Former Director of Extension & Education, BCKV, the State Agricultural University	Ph.D in Agril. Extension
3	Dr. Debabrata Dasgupta	Former Vice Chancellor, BCKV, the State Agricultural University	Ph.D in Agril. Extension
4	Dr. Debabrata Basu	Professor, Agricultural Extension, BCKV	Ph.D in Agril. Extension
5	Dr. Shankar Acharya	Professor, Agricultural Extension, BCKV	Ph.D in Agril. Extension
6	Dr. Rupak Goswami	Lecturer, Integrated Rural Development & Management Faculty Centre, RKMVU	Ph.D in Agricultural extension
7	Dr. Nasim Ali	Lecturer, Integrated Rural Development & Management Faculty Centre, RKMVU	Ph.D in Genetics and Plant Breeding
8	Dr. A. K. Pani	Professor, Army Management Institute, Kolkata	Ph. D in Agricultural Marketing
9	Dr. A. K. Roy	Former Principal of Staff Training College, NABARD	Ph.D
10	Dr. R. B. Mallick	Head of the Dept. Agronomy, Ballygunj Science College, Calcutta University	Ph.D
11	Dr. Asis Kr. Samanta	Dept of ARD, Govt. of West Bengal	Ph.D
12	Dr. B. K. Mahapatra	Central Institute of Fisheries Institution	Ph.D
13	Dr. Swadesh Mishra	Ex. Agricultural Meteorologist, Govt. of West Bengal	Ph.D
14	Dr. Vivek Roychowdhury	Professor of Indian Institute of Foreign Trade	Ph.D
15	Mr. Kalyan Maity	Pvt. Entrepreneur, Agro India Agri-Clinic	Agri-preneur
16	Dr. N. C. Sahoo	Programme Co-ordinator, Sashya Shamalaya, KVK,.	Ph.D

“Be the change that you wish to see in the world.”

– Mahatma Gandhi

